



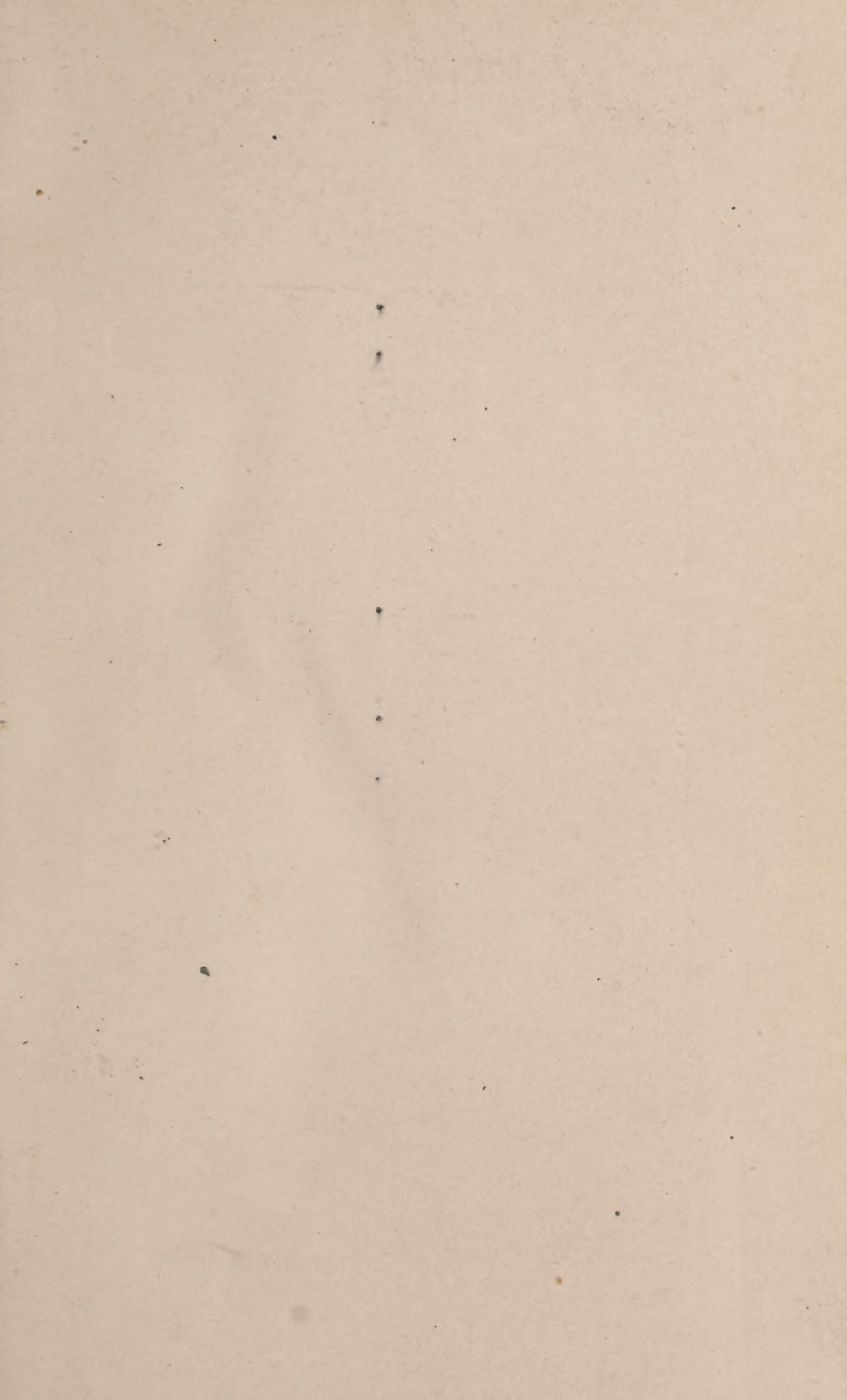
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John Hunter

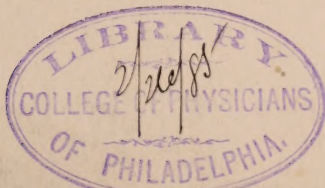
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No. 1.

ORIGINAL ARTICLES.

THE GALVANO-CAUSTIC METHOD IN NOSE AND THROAT.

BY J. C. MULHALL, M. D., *Physician to the Throat and Lung Department St. Louis Medical College Dispensary.*

[*Read before the Missouri State Medical Association.*]

THE great value of this method in diseases of the nose and pharynx, first proven and elaborated by Voltolini, is conceded by those who have had much experience in its use. As, however, it still holds no place in the armamentarium of even many specialists, and with the view of widening its use, I submit my experience, which consists of about one hundred and fifty operations.

After a full experience with all other destructive agents in these regions, I hold that it is, in every way, much their superior. When properly used the pain is but trifling, in proof of which I may say that no patient upon whom it has been necessary to operate more than once, has hesitated to submit, and in this list I include also several children. Most patients cannot resist expressing agreeable disappointment in this respect. There is no after pain, as, in my experience, there is also but little after in-

flammation. With no other caustic can we even approach the nicety with which we can grade the required destruction of tissues, either as to surface or depth. It is unique in one respect, inasmuch as though the actual contact be infinitesimal, the influence of the heat extends much further. I cannot do better in explaining myself than quote the words of one of the best known specialists, Loewenberg, of Paris. He says: "I attribute the general excellent action of galvano-cautery to the antiseptic action of the high temperature 130° C. [266° F.] a germ-killing means not to be equalled by any one. The nose is a receptacle for bacteria drawn in by inspiration. The galvano-cautery destroys them, and the scab covers and protects the burned surface from infection."

Is the galvano-cautery a dangerous agent? Cohen remarks that its incautious use in the nose may be followed by inflammation there and in the various contiguous organs, even to erysipelas of the head and face. Lennox Browne, of London, cites as unfortunate results in his practice several cases of purulent otitis media, and mentions as safeguards after intra-nasal operations the injection of warm alkaline solutions, and coating the burnt surface with oiled cotton wool to protect the charred surface. Permit me to quote his recommendations as to the degree of heat to be employed; "a black heat often answers for all that is required; a dull red heat is seldom needed, and by me never exceeded; a bright red heat is quite unnecessary; anything like a white heat absolutely to be avoided as dangerous." I do not wonder that this gentleman's practice has been attended with accidents, for his rules for operating are certainly the very ones to court disastrous result. Every one knows that black heat is very painful, and that in proportion to the increase of temperature is the decrease of pain, until white heat is reached, when pain is at a minimum. Furthermore, when the electrode is in contact at a black heat, it adheres with great tenacity to the membrane, and in its withdrawal requires even some force, a proceeding very painful to the subject, and, of itself, capable of lighting up a violent inflammation.

Indeed, this is a factor on which I desire to lay great stress, for it is to this, principally, that I attribute my own lucky rec-

ord. namely, that the electrode should, at no time during the operation, be in contact with the tissues whilst at a black heat. This involves the proposition that the electrode should not be allowed to cool *in situ*, but should be withdrawn from contact at the same temperature as was maintained during contact. I never use a heat less than red, and, preferably, a heat between bright red and white. Again, my practice is to heat the electrode before contact, when possible. If I were to try to attempt to formulate my idea, I would therefore say: attain a heat midway between bright red and white before contact, maintain it during contact, and particularly when dissevering contact. This rule applies specially to intra-nasal and supra-pharyngeal operations, and does not include loop operations, nor applications to naso-pharyngeal fibroid polypi. In all my operations, I have never had the slightest disagreeable issue except in one case. In this the electrode became cool whilst in contact with hypertrophied tissue at the vault of the pharynx through a conducting wire having become detached from the galvano-cautery handle. I was compelled to pull quite forcibly in order to detach the electrode from the tissues. Headache, persistent for several weeks, followed this manipulation. I have even operated upon the posterior lip of the Eustachian outlet without even uneasiness following in the middle ear, though, as in all my operations, I used no alkaline solutions, nor oiled cotton wool, nor any other treatment to prevent after inflammation in the nose or contiguous organs. The one disadvantage of this method is the unreliability of batteries, for, even with the best of intelligent care, they cannot be absolutely depended on, an objection with which I, however, willingly contend.

The diseases which I have thus most frequently treated are hypertrophic nasal catarrh, dry or humid, adenomata, vegetations and thickenings at the pharyngeal vault, granulations and linear hypertrophies in the pharynx and chronic follicular tonsillitis.

It is certainly beyond our art to do more than alleviate atrophic nasal catarrh, but the opposite and more frequent variety can, in every case, be greatly relieved, and in many cases cured. I believe myself to be acquainted with the use of most local

remedies in furthering this object, and I do not hesitate to say that in the galvano-cautery we have perhaps the most valuable of all agents. It has several times happened to me in cases of mild but persistent hypertrophic catarrh that after a half inch superficial linear burn of the anterior inferior turbinated tissue, patients have considered their condition so much improved as to abandon further treatment; for the good effect is not confined to the spot burned, but is participated in by the whole nostril, the explanation being a reflex vaso motor or secretory nerve action, or, possibly, the antiseptics of great heat. I have, also, for instance, converted a dry catarrh into a mildly moist one, not an inconsiderable relief. I limit myself, as far as the inferior turbinated bone tissue is concerned, to the anterior three-fourths, preferring Jarvis' snare for posterior hypertrophies. When the middle turbinated bone tissue is much thickened, the anatomical sequences are closure of the olfactory and semilunar fissures, stenoses of the infundibulum and maxillary foramen, consequent diminished olfactory perception, infra-orbital uneasiness and supra-orbital heaviness or pain. A galvano-cauterization or two on the under surface of the anterior end of the middle turbinated bone tissue is an effective method of permanent relief.

In my case-book I speak of red and white hypertrophies in the nose. In the one the membrane is bright red, tender, bleeds easily, and exudes a viscid, white, stringy mucus; in the other the membrane is rose-colored or pale, non-sensitive, succulent, flabby, and exudes a non-adhesive mucus, which inclines to be purulent. The results of the galvano-cautery are more brilliant in the latter; and, when possible, I always first with soothing remedies reduce the congestion in the former before operating.

I do not limit myself to any one procedure. I make linear, punctate, superficial or deep wounds, varying the *modus operandi* according to indications. I operate several times in the same nostril, if necessary, till its normal respiratory calibre is gained. I never operate in both nostrils at the same time; I always wait till one wound is healed before producing another. With Jarvis' snare we have the most painless and bloodless method of removing the ordinary soft nasal polypus, and in the galvano-cautery we have, I think, the most certain means of pre-

venting their recurrence, of destroying polypoid inceptions, yet too minute to be recognized. We are, at the same time, using a splendid agent for curing the nasal catarrh, with which nasal polypi are nearly always associated. The vault of the pharynx, with its tonsils and membranous folds, is invariably a participant in the pathological conditions, or sequences of nasal catarrh. When the latter is of the atrophic variety, so also are the changes in the supra-pharynx atrophic, and vice versa. When chronic plastic inflammation exists there without much thickening, I rely alone on various strengths of nitrate of silver, taking care that none enters the nasal cavities proper; but when considerable and irregular growth occurs, I use the galvano-caustic, always operating per orem, and securing the palate by Wales' procedure, that of passing rubber cords through the nostrils and out of the mouth, the latter manipulation being usually far more disagreeable than the burning. I have thus treated the various cystic and catarrhal growths so frequent there, with very satisfactory results. Pharyngeal granulations seldom, in my opinion, form a primary disease, and are frequently treated without reference to their determining cause. When it becomes necessary to destroy them, we have in the galvano-cautery, as several authors have written papers to prove, the very best of methods. It is also my practice to incise with the cautery knife the enlarged veins often found connected with them. In this disease it is usually desirable that the intervening patches of membrane remain undisturbed, a result that the perfect control of destruction the galvano-cautery presents, assures us. In those cases of cheesy concretions in the tonsils, often the cause of foul breath, is this cautery specially indicated, since it fulfills the two requirements of cure, namely, a destructive agent that will reach the bottom of the often deep and tortuous lacuna, and a germicide, for these accumulations swarm with the germ known as the *leptothrix buccalis*. My practice is to first clear out the mass, to measure the depth and direction of the follicle so as to bend my electrode accordingly, to introduce it cold and withdraw it hot. I have not found it necessary to use this cautery in ulcerative processes in these regions, which are nearly always syphilitic. In one case only, that of a phagedenic ulcer in the cheek, origi-

nally excited by a ragged tooth and maintained by the cachectic state of the individual, have I used it. I cleaned the surface, scored it in parallel lines with the cautery, with the result, when the eschar separated, of showing a healthy ulcer. I will close my paper with an account of a case in practice.

Miss C—, sent me by Dr. Friedman, of St. Louis. Old hypertrophic nasal catarrh, obstructed nasal breathing, frontal pain, viscid but copious nasal discharge, fullness of throat, tinnitus aurium, deafness and substernal oppression. Has been treated with sprays, inhalations, various caustic, astringent and soothing applications, and persistent Eustachian tube inflations with no permanent benefit. There exist light red, dense anterior nasal hypertrophies, general thickening at the vault of pharynx and Eustachian outlets, obliteration of the Rosenmüller's fossæ, pharyngeal granulations, retracted drum membranes. Hearing reduced to two inches in right ear, one inch in left, tested by my watch. Treatment consisted in tepid salt water as a detergent, Politzer inflations and twelve galvano-caustic operations, during the space of nine months, three in the right nostril, two in the left, one on the posterior lip of each Eustachian tube, two in the supra-pharynx, two in the middle and one in the lower pharynx.

Her condition, now maintained for six months, is much improved. She breathes freely through both nostrils, her throat symptoms have disappeared as well as the tinnitus aurium, and sternal oppression; occasionally some mucus falls into the pharynx, but the discharge is so slight as to cause no annoyance. Her hearing is by no means perfect; but she readily hears my watch now at four feet, a very decided improvement.

I do not mean to assert that I have recorded no failures to cure, but I do assert that no case has been without improvement; quite a number have been cured, and none have been injured.

N. B. The battery I use is the two-celled one of Dr. Dreschler of New York. I prefer his handle and electrodes to those of Dr. Shurly, of Detroit; but I use, occasionally, the latter gentleman's instruments. The only nasal protector I use is that of Dr. Shurly.

2201 Olive street.

RECENT PROGRESS IN THE TREATMENT OF
DIPHTHERIA.

BY L. A. MERRIAM, M. D., OMAHA, NEB., *Professor of the Principles and Practice of Medicine in the University of Nebraska College of Medicine, Lincoln, Neb.*

IN the therapeutic management of diphtheria we resort to two methods of treatment, viz., 1st, general, and 2nd, local, because diphtheria is essentially a general disease with local manifestations. And since we do not know the exact nature of the poison and cannot meet it by a direct antidote or rather a medicinal agent that will destroy it directly, it behooves us to fortify those parts of the system upon which it usually spends its force. We know, or judge by the objective and subjective symptoms presented, what parts or tissues of the body are directly and indirectly affected by the poisonous agent, and we prescribe remedies in accordance with their known physiological action, or in the absence of such knowledge we prescribe empirically.

The diphtheritic poison produces primarily extensive disorganization of the blood, thereby affecting secondarily and generally all the tissues and fluids of the body, particularly the delicate structures of the nervous system. Locally it seems to spend its force upon the mucous membrane of the air passages, impairing their function, and obstructing the free entrance and exit of air. First on the list of therapeutic agents I place the various official preparations of iron and particularly tincture of the chloride of iron, dialyzed iron, and the perchloride of iron; for iron stimulates the blood-making functions and increases the quantity as well as the quality of the blood, thereby retrieving more or less the damage to the blood by the diphtheritic poison. For this reason I hold iron to be the most useful of the therapeutic agents, and would advise its use internally in small and frequently repeated doses. For instance, to an ordinary adult I would give three minims in glycerine or syrup every hour. The reason for small and frequently repeated doses is that it is a well known physiological law that duration of stimulation is equivalent to

increase of stimulation, and since the essential action of iron is to stimulate the blood-making functions, a gentle stimulation may be had by giving small doses, and by frequently repeating them the effect is increased. Iron is used by many for its purely local effect. Now the object of local treatment must largely be to dissolve or assist in the removal of the membranes formed, or to oppose their reproduction by a direct action upon the tissues inflamed. The only good reason, it seems to me, that can be assigned for using iron locally is that it acts as a gentle stimulant to the parts affected, and thus tends to prevent the reproduction of the membrane. It does not assist much, if any, in the removal of the membranes nor tend to relieve the inflamed tissues, and it is a most disagreeable gargle, as generally used. But given internally, as I have directed, its general effect is often well marked, especially in those who exhibit any tendency to anemia. Many physicians are in the habit of giving large doses of iron in diphtheria and also in other diseases. This practice I think is to be condemned as useless and dangerous—useless because we get the full effect of iron in small and frequently repeated doses, and dangerous because of the liability to formation of intra-cardiac fibrinous coagula.

Quinine stands next in importance as a recuperative agent, toning up and strengthening the nervous system when given in small and repeated doses, for instance, three grains every three hours. It acts by its moderate stimulation of the vital forces in accordance with a well known and universally accepted physiological law, viz., that a faint or moderate stimulation increases the activity of an organ or function, thereby increasing its strength, but beyond a certain limit increase of stimulation diminishes and finally arrests its activity. I wish it distinctly understood that I would *not* give iron, quinine, or any other remedy continuously through the course of the disease, regardless of the indications presented by the various patients and the varying conditions of the disease.

Third upon the list of useful agents I place alcohol, I think usually best given in the form of brandy, for its general stimulating effect. Small doses will usually be found sufficient in the earlier stages of an attack. At a later period larger doses will

often be required. Since it has been clearly proven that one and a half ounces of alcohol, equivalent to three ounces of brandy, and in some cases more can be appropriated and utilized daily by an ordinary adult both as a tissue-building food and as a force-producing agent; and since the poison of diphtheria tends to destroy life by asthenia and destruction of the blood, so alcohol exactly meets the indications by supplying just what the diphtheritic poison destroys.

Next upon the list of therapeutic agents I place chlorate of potash, an agent which if given in large doses becomes a powerful irritant to mucous membranes. But it should not be given in large doses nor for its local effect. It should be given internally in small and frequently repeated doses and for its selective local effect. An irritant in large doses, it becomes a gentle stimulant when given in small doses, and in accordance with the physiological law regarding the effect of stimulants before mentioned. It is essential in the use of this remedy that you do no harm by large doses. Hence, always be sure and give doses so small that you will get the gentle stimulating effect and not the poisonous one, which I fear often assists in producing the death of the patient.

But you say, "Your doses are so small that they will have no effect." Well, it is true that doses which will have no effect upon a healthy membrane, tissue, organ or gland will have a powerful effect often upon a diseased one. And this is in conformity to another well-known physiological law that irritated or inflamed tissues have their nerves in a hyperesthetic condition, and are more easily influenced by a smaller irritant or dose of medicine than if they were in a healthy state. So chlorate of potash, when used in small and frequently repeated doses, acts as a gentle stimulant to the diseased mucous membranes of the mouth, nose and throat, and thus fortifies them against the depressing effect of the diphtheritic poison.

The opinion prevails in the minds of some of the best thinkers in our profession that medicines act chiefly, if not wholly, through their influence upon the delicate structures of the nervous system, and, if this be true, it harmonizes with the position I have taken in the treatment of diphtheria.

Mercury has won some reputation as a valuable remedy in diphtheria, being used in the forms of the bichloride, protiodide and biniodide. Which form is preferable may be a matter for discussion. They all are valuable when given in doses small enough to get only their physiological action. Mercury spends its force largely upon the nerves distributed to the mucous membrane of the alimentary canal, and when given in small and frequently repeated doses, for instance, corrosive sublimate $\frac{1}{10000}$ of a grain to $\frac{1}{2000}$ of a grain every fifteen minutes and smaller doses to children, it acts as a gentle stimulant, invigorating and strengthening the parts upon which it spends its force. It is also held that it lessens the plastic exudate of inflammatory processes, and that this quantity, though small, will sterilize living blood and increase its resistance to the invasion of organisms. It also increases the number of red corpuscles, and improves their quality; and while it may be a question as to the specific action of mercury upon the poison of diphtheria, this much we know, that small doses of mercury are tonic, or, as we say, a gentle stimulant, and tend to fortify the system against the depressing influences of the diphtheritic poison.

The nitrate of pilocarpine has been used of late, not because it is deemed a specific, but because it acts by increasing the secretion of the diseased parts, and thus, it is held, hastens the loosening and exfoliation of the diphtheritic membranes, and abbreviates the course of the disease. It does more than this, for, when once its sialogogue effect is obtained, by continuing the remedy in smaller doses, it acts in accordance with the law previously mentioned, and strengthens by its tonic properties the parts upon which it exerts its influence, and assists in preventing the formation of false membranes. Great care is necessary in prescribing pilocarpine, for some persons are very susceptible to its influence; hence the beginning dose should always be small. The one-hundredth of a grain is large enough for the first dose, which can be repeated every fifteen minutes, if the case requires it.

Pilocarpine in some cases has not met with the success expected, and very likely it is because a careful discrimination was not made as to the indications in the respective cases. Remedies are

too often prescribed on general principles for various diseases, little care being given to the special indications for the special remedy.

Many other remedies are used internally in diphtheria, chief among which may be mentioned *phytolacca decandra*, for its action on the glandular system; bichromate of potash, for its alterative and antiseptic properties; and last, but not least, lachesis, or the poison of the lance-headed viper, which, when given in sufficiently small doses, has a powerful remedial influence upon the cerebro-spinal system, the glandular system, and the blood. When given in lethal doses, it produces death by rapid paralysis of the cerebro-spinal system; but when given in remedial doses it strengthens and fortifies the nerve centres against the poisonous influence of the severer forms of diphtheria. Those cases where the patient's strength is about gone from blood poisoning, where the glands of the throat are greatly swollen, the exudate is of a dark color, and of an intensely fetid odor, and there are copious hemorrhages from the nostrils, or acrid secretions, excoriating the skin, a sensation of suffocation with tendency to suppuration and gangrene with low typhoid symptoms; all are benefited by the proper use of lachesis.

Before closing what I have to say upon internal medication in diphtheria, let me call your attention to another law, explanatory of what we all do when we give two or more remedies together, and that is that the simultaneous influence of several stimuli, each of which, separately, excites the same centre, is cumulative; that is, stimuli assist each other, and their resultant is their arithmetical sum.

Since the contagious principle resides largely, if not wholly, in the false membranes, they become a constant source of infection in the same individual and in others, hence the endeavor to get rid of them, and prevent their reproduction by local treatment. For this purpose, brushes, swabs and pencils, which often do much harm; hot medicated spray of lime water, eucalyptus globulus, (a dram to a pint of water) lactic acid, citric acid, and juice of limes have been used. Hot gargles or steam inhalations of boracic acid, salicylic acid, or brandy, and various other local applications, familiar to you all, have been us

But the question for me to answer to-day, and for you to discuss, is not what is the best treatment for this terrible disease; but it is, what progress has been made of late in the treatment of diphtheria.

Diphtheria is a disease which with all your therapeutic resources you will continually fail to treat successfully. And if there is really no specific, no medication which is curative for these affections, there are certain modes of treatment which are dangerous and which are to be avoided, and other modes of treatment that are safe and to be employed.

No medicine can be used indiscriminately, for the varying constitution of the malady and of the patient profoundly modifies the results of the treatment, and explains why a host of remedies have been prescribed for diphtheria, which in certain epidemics have given good results, and in others have signally failed. Because the indiscriminate treatment and heroic doses of the past have failed to conquer diphtheria, there are some men who have become "doubting Thomases" with little or no faith in medicinal agents, and who maintain that a "masterly inactivity" is the one grand essential in the treatment of disease. Now a physician who lacks faith in medicinal measures has no more reason for existence than a priest who does not believe the religion he teaches, or a soldier destitute of love for his country and his flag.

There are others who decry what they do not understand, and deprecate remedies with whose potency they are unacquainted, who rail and rant at everything new unless it comes through their own narrow channel. But the day of therapeutic nihilism is passing away, and we are entering upon a time when there is to be a return of faith, stronger, firmer and more capable of giving a reason for its existence than in the past, and it is coming in the new and scientific road of physiological therapeutics; and though the road is scarcely marked out, and but a few stakes are set here and there, yet it is widening and there is hope for the future. I have not attempted to give you new remedies, for the recent progress in the treatment of diphtheria has given us none; but I have called you attention to a more rational method of using the remedies we already possess. That rational method is to give medicines for their physiological action; and the recent

progress in the treatment of diphtheria is the realization of the necessity for a careful discrimination of the conditions present in the disease, and a judicious choosing of the right remedy to meet these indications. To prescribe iron, quinine, and chlorate of potash in a case of diphtheria, simply because you have made a diagnosis of diphtheria, and regardless of the peculiar combination of symptoms presented, is unworthy of a profession that claims to build upon a scientific and rational basis. What are the objective and subjective symptoms presented in a case of diphtheria that induce you to prescribe chlorate of potash in one case and tincture of chloride of iron in the other, or pilocarpine in one case and alcohol in the other. The line of thought which I have presented in this paper may be a surprise to some of you, but it is the coming question in therapeutics and the one for your discussion to-day.

THE USE OF OPIUM IN CONGESTIVE FORMS OF FEVERS.

BY J. J. McALMONT, M. D., *Professor of Materia Medica and Therapeutics in the Medical Department of the Arkansas Industrial University, Little Rock.*

[*Read Before the State Medical Society of Arkansas at the Ninth Annual Session, Little Rock, Apr. 30th, May 1, 2, 1884.*]

I ONLY wish for fifteen or twenty minutes of your valuable time to call attention to the use of opium and its preparations in the dangerous and often fatal variety of intermittent and remittent fevers called congestive, pernicious, or malignant.

* * * * * * * * * *

I commenced the use of opium in these cases over thirty years ago in the State of Ohio, where I practiced medicine before coming to Arkansas. There had been several deaths from this fatal form of malarial fever in my neighborhood, notwithstanding the early and vigorous use of the remedies recommended for such cases, ammonia, diffusible stimulants, chloroform, ether, sinapisms, hot baths, quinia, etc.

I gave one-fourth of a grain of sulphate of morphia in a case that I considered worse than those that had terminated fatally, with such a quick and encouraging change for the better that in a short time I gave one-eighth of a grain more, and continued to repeat it occasionally, in the latter dose, in conjunction with stimulants, until reaction was established, when the exhibition of quinia was commenced.

Encouraged by this first case, I continued the treatment in all such cases that occurred in my practice. After a successful use of opium in several cases, I proposed its use in a case in which I was called in consultation; but the proposition was not favorably received; there seemed to be a dread of opium in such conditions. They associated the condition with inflammation and irritation of the brain. We made three post-mortem examinations of adults, dying in this condition, without finding any evidence, as I thought, of inflammation; but they were not satisfied, and I gave up the matter so far as they were concerned, but myself continued its use there when required, until I came to this state and located at Benton, in Saline county, where I had an equally successful experience in its use.

I examined two cases in Saline county that died, one just before I saw the case, and the other soon after my arrival. The cadaveric rigidity was well marked. The surface presented a sallow hue. The skin of the superior parts after death was pale and bloodless, whilst the inferior dependent portions presented a mottled purplish color, due to the gradual settling of the blood in the capillaries. The lips and gums were pale; the lungs, kidneys, liver, stomach, and brain presented similar evidences of the settling of the blood in the vessels and capillaries of dependent parts. The dura mater was normal, the arachnoid membrane transparent and natural, the pia mater congested, but without marks of inflammation; subarachnoid fluid clear, blood-vessels of the brain filled with blood, the brain normal in appearance and consistency. There were no evidences of inflammation.

The action of malarial poison is depressing rather than inflammatory, causing stagnation of the blood and perversion of the chemical changes in the capillaries of the brain, due to the action of the altered blood upon the nervous elements, and the

direct action of the malarial poison upon the nervous system. Whatever stimulates the nervous system and excites the action of the heart, acts directly antagonistic to the effects of the malarial poison.

Stillé says in his great work on therapeutics "As a general rule, a full dose of opium renders the action of the heart stronger and more frequent in the first instance, while the skin becomes turgid and red; subsequently, however, it reduces the frequency without diminishing the volume of the pulse. Opium influences the breathing precisely as it does the circulation; both functions simultaneously experience an increased activity.

Before the introduction of cinchona in medicine, many agents were successfully employed for the cure of intermittents, which the specific virtues of bark have led us, perhaps unwisely, to neglect. Of these, opiates were among the most esteemed. They were prescribed, either before the paroxysm, to prevent it, or during its progress, to moderate the severity of the fever. Recent experience in the treatment of *periodical fevers* leaves no doubt of the importance of hypodermic injections of morphia in mitigating the severity of the approaching paroxysm and even in preventing it entirely."

Bartholow, in his Therapeutics, says, "Opium, in small doses, is a valuable tonic to a *weak and dilated heart*. A threatened paroxysm of *intermittent fever* may be aborted by the hypodermic injection of morphia (one fourth of a grain). This practice has a high degree of importance in the *pernicious intermittents*, when time is not afforded for an effective use of quinine. The febrile heat of *intermittent and remittent fevers* may be diminished, and the sweating stage induced earlier, by the use of opium in moderate doses (ten minims of the deodorized tincture every two, three, or four hours). The addition of morphine to quinine enables the latter to be better borne by the stomach, counteracts some of the unpleasant effects on the brain, and increases the therapeutical power. Some cases of sunstroke, *coup de soleil*, or 'thermic fever,' are rapidly cured by the hypodermic injection of morphine. When the patient is able to swallow, good effects follow the conjoined administration of tincture of opium and brandy. The cases benefited by this treatment are characterized by pallor of the face and weakness of the heart—heat exhaustion."

There is no lack of authority for the use of opium in failure of the heart and respiration.

Much that was incomprehensible is easily understood, now that the function of the sympathetic nerve, as regards its action in

regulating the calibre of the blood-vessels, is so well understood. The pneumogastric nerves unite the medulla oblongata and the semilunar ganglia, establishing intimate relations between the cerebro-spinal, and ganglionic, or sympathetic nervous systems; whereby the viscera of the abdomen, which have no direct connection with the brain, experience modifications from the influence of the cerebrum. Opium in small and repeated doses stimulates the cardiac ganglia of the sympathetic, and increases the vigor and frequency of the heart-beats; this stimulation, however, is not confined to the cardiac ganglia, but extends to the vaso-motor ganglia of the whole system; causing a general rise of blood-pressure.

The well-known fact that death from opium poisoning is caused by failure of respiration; and that to maintain respiration is the ultimate object of all measures which are commonly undertaken for the purpose of arousing the system in opium-poisoning, may possibly deter some. We think sufficient evidence has already been adduced to remove that impression. We possess in sulphate of atropia the principal systemic antidote to opium poisoning; and though I have had but little experience in its use in conjunction with opium in those cases under consideration, I have no doubt, from its physiological action upon the nervous system, that it might frequently be combined with opium to great advantage, particularly when the respiration is greatly embarrassed. We possess in atropia and ammonia most powerful means for acting upon the respiration.

The physiological effect of opium cannot be used as a measure of its effect and usefulness in a pathological condition, either in these or any other cases. Its effect in the narcosis of malarial poisoning, when used hypodermically, before too late to get its peculiar, or specific effect on the nervous system, is almost instantaneous. It is the better plan to give small doses frequently repeated, watching closely its effect upon the circulation and respiration.

You will occasionally meet with a case, in which the coma will last a long time; but by continuing the use of opium in small doses, in conjunction with small doses of atropia, if you think best, ammonia, diffusible stimulants, sinapisms, hot baths,

and quinia, the case will slowly but surely recover. There is a gentleman now in this city whom I treated in a case of this character many years ago, before the days of hypodermic syringes; one-fourth of a grain of morphine was dissolved in a few drops of water and placed far back on the base of the tongue, trusting rather to its absorption, than to its being swallowed; after a while it increased the force of the circulation, and the temperature of the surface, and the respirations were improved. We continued the morphine in doses of one-eighth of a grain, as the condition of the patient indicated. We continued this treatment a week before complete consciousness was restored. We have recommended this treatment to a few of our medical friends, who have used it with the happiest results, and are warm in their expressions of commendation. We have endeavored to thoroughly teach each medical class, that has met here since the opening of the medical school, the use of opium in congestive malarial fevers. We feel that the practice will now have a fair trial, and its use in these cases, will become as well established as that of quinia.

NOTE TO ADVERTISERS.—We receive constantly from some of our patrons requests for editorial mention of the preparations which they advertise with us. In order that there may be no misunderstanding with regard to our course in this particular, we wish to say now, that it has been the policy adopted in the first year of the COURIER, and to which we have adhered ever since, that no space should be given in the reading pages to editorial or other mention of articles advertised.

We endeavor to maintain a rigid supervision over the advertising pages of the COURIER, and do not purpose admitting to them anything which is not at least worthy of trial by our readers. This is our indorsement of our advertisers. We believe that in this policy we are in sympathy with the best conducted and most influential journals of the country, and that it is the true policy for every journal which aspires to permanent influence among the best men of the profession.

CASES FROM PRACTICE.

MISSOURI MEDICAL COLLEGE DISPENSARY.— SURGICAL DEPARTMENT.

Service of T. F. PREWITT, M. D. Reported by V. L. BROKAW, JR.,

COMPLETE BACKWARD DISLOCATION OF THE STERNAL END OF THE RIGHT CLAVICLE.

Mrs. B. Kenny, æt. 38, presented herself at clinic Dec. 27th, 1883. Five years previously, while sitting on the steps, she received a blow on the chest at the sterno-clavicular articulation, from a man who had been drinking.

The blow was followed by immediate loss of consciousness, and on recovering she found herself in bed, where she had been carried by her friends. She complained of some pain at the site of injury, also, of some dyspnea. The parts were swollen and congested, of a black and blue color, and very painful on manipulation. Her arm (right) was completely paralyzed for forty-eight hours, after which time she could move it again, but good use came back very gradually; five months elapsed before the patient could work.

She received no surgical attendance whatever. Cold applications were ordered, and the advice given to stay in bed and keep quiet.

On examining the patient, the deformity was very evident. The distance from the acromion to the centre of supra-sternal notch is half an inch less on the right side. On manipulating a distinct grating may be felt and heard, in character not unlike a very decided crepitus of fracture. By pressing the shoulders inward, the extremity of the right clavicle may be pushed completely across the supra-sternal notch, until it meets the anterior margin of the left sterno-mastoid muscle. Drawing the shoulders back reduced the dislocation. The bone does not remain *in situ*, displacement taking place with each movement of the extremity.

The patient is a washerwoman, and when washing or "wringing out" clothes can feel and hear the bones grate. When ironing with a very heavy iron, after washing for several hours, she often becomes very hoarse, probably due to indirect pressure upon the recurrent laryngeal nerve. She also complains of occasional numbness of the extremities, at present (June, 1884) is being treated for a Colles' fracture of left radius.

REPORT OF CASE OF STRICTURE OF RECTUM, TREATED BY DIVISION AND DILATATION.

By L. T. HALL, M. D.

[*Read before the S. E. Missouri Medical Association.*]

In March 1883, my brother and myself were consulted by T. H for some trouble of the bowel, which, upon examination was found to be an annular stricture of the rectum, located about an inch and a half from the verge of the anus, and so narrowing the passage as to scarcely admit the passage of a No. 6 bougie. The patient's cachexia indicated grave constitutional disturbance, which, with the induration of tissues surrounding the stricture, suggested even the probability of malignant disease.

The history of the case was quite obscure; though pretty clearly excluding a syphilitic origin. Patient had had dysentery, and for some time, as he supposed, had been suffering from, and was treated for piles.

The urgency of the symptoms decided us upon an operation by division of the constricting band. Placing the patient upon the table and under ether, the sphincter was forcibly dilated and the stricture divided with the knife. Passing the finger through the divided stricture a second one was found about an inch beyond the first, but not involving the entire circumference of the gut. The hemorrhage was slight, and operation otherwise attended by no unfavorable results. The mucous membrane above the stricture was found thickened and indurated, and seemed to involve quite an extensive area. The gut was packed with absorbent cotton filled with iodoform, and this practice, or iodoform in capsule, was continued in the after treatment, which consisted in dilatation with rec-

tal bougies resorted to at gradually increasing intervals. Occasional applications of nitrate of silver were made.

The immediate effect of the operation was to give relief to all the urgent symptoms, the patient having the first comfortable evacuation he had experienced in many months.

Treatment was continued through several months, the patient rapidly gaining in flesh and strength, finally returning to his home and work in a neighboring county. I met him some weeks since, and failed to recognize him in the appearance of perfect health presented.

He tells me he has had no return of the trouble and is in the best of health.

SLOW PULSE OCCURRING IN A CASE OF RHEUMATIC AFFECTION OF THE JOINTS.

BY. W. C. GLASGOW, M. D., ST. LOUIS, MO.

[*Read before the Missouri State Medical Association.*]

I did not intend to present a paper at the present meeting, but a few days before I left home, I met with a case so rare and interesting that I feel called upon to put it on record before this association.

On the fourteenth day of May a strong, hearty, young man of 18 years, came into the Sisters' Hospital, complaining of pain in his knees; there was slight pain on pressure and motion, but no fever. He was given a mixture of iodide and potash with colchicum and nothing unusual was noticed until the 16th. In the afternoon of that day on attempting to walk across the room he was taken with what was called a fainting spell. He felt dizzy, with a swimming of the head, and, as he expressed it, everything became black before his eyes. He lost consciousness for a moment. On being placed in bed, all the symptoms disappeared with the exception of the dizziness; this also passed away in a short time, and he felt perfectly well. Late in the afternoon he had a similar attack while lying quietly in bed. A physician accidentally visiting the hospital was called to see him; he gave him a mixture of digitalis with carbonate of ammonia. He slept quietly during the night. Early

the next morning he had an attack, which was repeated at intervals during the morning. At ten o'clock he began to vomit his medicines, and everything in the shape of stimulants and nourishment.

I saw him first at twelve o'clock; he was very cold, the extremities feeling more like those of a dead than of a living person. He was breathing quietly, his respirations sixteen to the minute, were shallow and weak, interrupted every few minutes by a sigh. He was perfectly conscious when spoken to. His pulse varied from twenty-four to forty beats in a minute, the rate constantly changing every few minutes. It was soft, tolerably full, prolonged and compressible, with an occasional intermission. The prolonged character of the beat was very marked; it seemed as if the ventricle instead of emptying itself by a sudden rapid contraction, rather squeezed the blood out by a prolonged effort. The apex beat was feeble but perfectly perceptible, and corresponded in rate with the pulse. A marked pericardial murmur was present, but there was no sign of pericardial effusion. The heart appeared normal. Hot stimulating fomentations were applied to the pericardial space, and a hypodermic injection of strychnia with atropia was given. Within ten seconds after the hypodermic injection had been given, the pulse increased in volume and rate; within a very short time it reached seventy-two beats to the minute, and all abnormal symptoms disappeared. (The patient had no recurrence of the attacks and the pains in the joints disappeared.) He was again given the colchicum mixture, and in five days left the hospital perfectly well; the pericardial murmur, however, remained.

A question will arise: What was the cause of the slow pulse with the accompanying symptoms in this case? Neither the pulse, the heart-beat nor the symptoms corresponded with those usually met with in rheumatic endocarditis, or the first stage of pericarditis. I am inclined to think that the condition of the pulse and the symptoms were rather due to an irritation of the vagus, by the changed condition of the blood in the disease. The prompt response to the hypodermic use of the strychnia and atropia, and the immediate improvement of the pulse seem to strengthen this view of the case.

We know that the vagus is the inhibitory nerve of the heart, and also, that its stimulation results in slowing of the heart beat; after

atropia, however, has been injected, even in minute doses, no inhibition can be produced by stimulation of the vagus, even with the most powerful currents. (M. Foster.) The strychnia in this case, would act as a powerful motor excitant on the heart, through its action on the ganglionic centres and the sympathetic; at the same time it would tend to paralyze the vagus (M. Foster), and thus aid in restoring the equilibrium of the circulation.

Slow pulse is met with frequently in practice. In certain persons it is normal, as, according to Rouchoux, the pulse of Napoleon I. was normally 40; in the majority of cases it is due to a fatty degeneration and weakness of the left ventricle. This is often the result of atheromatous changes of the coronary arteries, causing a defective nutrition of the heart. The slow pulse in some of these cases is more apparent than real; it is the result of the inability of a weakened left ventricle to produce a perceptible distension of the distant arteries, except in alternate beats; this is clearly shown when through the use of digitalis an increased power has been given the heart and the imperceptible alternate beat becomes perceptible. The slow pulse due to a weakened heart is usually constant, but with improved nutrition of the body, and, consequently, of the heart, it may gain in rate and become normal. When due to a failing heart, it is always accompanied by the physical signs of organic disease of the heart.

In the present case, the slow pulse was certainly not a normal peculiarity; it was also not due to any weakness of the heart from fatty disease—it could not be due to the influence of colchicum, nor could it be the effect of the pericardial inflammation.

It seems to me that we can only ascribe it to an irritation of the vagus by the changed quality of the blood, and the effect of the treatment seems to verify this view.

MISSOURI PRESS ASSOCIATION.—It was a disappointment to the editor of the *COURIER* that professional duties prevented his attending the annual session of this association at Springfield, especially as it appears that the medical press of the state was not represented at all. Those who attended the meeting report a very enjoyable time. The citizens of Springfield entertained the association very handsomely, and the meeting is said to have been the most successful and valuable ever held by the association. The meeting next year will be held at Columbia.

EDITORIAL.

SEDALIA MEETING OF THE STATE MEDICAL ASSOCIATION.

Two considerations specially forced themselves upon the mind at the last session of the State Medical Association, the good attendance at the first sitting and its marked representative character, and the lack of discussion of reports and essays presented. The former was a matter of congratulation, the latter of regret. As all are equally interested in the prosperity of our State Association, it will be worth while to look into these matters for a moment.

A central place of meeting, easily accessible, naturally insures a good attendance. At an earlier session, 1878, at Sweet Springs, this fact was so patent, as well as the convenience of the place otherwise, that a motion was put that the Association henceforth continue to hold its meetings there. No doubt the desirability was generally felt, but it was very wisely and justly argued that in the then disorganized state of the profession over a large part of Missouri, the presence of the Association, as a representative body, was needed in the different sections from time to time; its influence thus directly felt would encourage and invigorate local organizations, or lead to their formation where none existed. This view was so much that of the mass of the delegates that the motion was defeated, and no similar one has been since brought forward, nor has the time yet come, unfortunately, when the chief reason for its defeat should cease to exist. We may hope to see the time when the whole state shall be occupied by live local societies: it is a necessity, if we are ever to have a united body in the state, and, as

we well know, until the profession is so united it cannot expect to move in co-ordination nor to exert its legitimate strength.

The resolution adopted at Sedalia, that henceforth associate *i. e.*, active, voting members of the Association, must be accredited from a local society, is an excellent one; it was one of the most important acts of the session, and is in exact accord with the meeting of 1878, which, as above explained, settled the policy of the Association in a vital matter.

The second consideration, the proper treatment of papers presented at the session, does not result in as satisfactory a conclusion. It must be confessed that the sessions are too chaotic in some respects. Evidently, the delegates are resolvable into two sets, one that regards the legislative capacity of the State Association as paramount; the other, while recognizing this as an invaluable prerogative, still holds the Association to be organized chiefly for scientific purposes—the collation, presentation, and discussion of subjects directly pertaining to the practice of medicine. Now, an excess of either class of business must defeat the fundamental object of the organization. The only way out of the difficulty is to have a regular set programme of business, which is to rule the session and to have precedence of all else in the conduct of its business. This programme should be printed and mailed to all members at least one month before the time of meeting, earlier rather than later. It should contain, besides date and place of meeting, list of officers, etc., the titles of reports to be presented together with the name of the reporter and a list of essays, this list to be prepared from notices sent the secretary by members intending to present papers. At the session such a programme should be rigidly followed, and all papers, and formal motions, new matter desired to be brought forward at the session, should follow in due order upon the exhaustion of the regular programme; any exception to be allowed only on showing good cause, or by vote of the Association. Such a regulation of business would prove an immense advantage in carrying on the session successfully and satisfactorily

to all. A motion at the next session to establish such a method, would meet an obvious and pressing need. It is needless to point out that the wide distribution of such a programme, would inform the profession of the topics to be brought up, and so invite a thorough discussion; it sometimes happens that a suggestive paper gives rise to a discussion in the highest degree instructive, besides affording opportunity for comparing notes and shaping thought. As one of the veteran and most energetic delegates remarked, "One picks up ideas that, subsequently, in practice, prove invaluable; the contributions of the many make the strength of the individual."

AMERICAN AND BRITISH FECUNDITY.

Many writers have given to the world, more or less voluminously their thoughts upon the alleged deterioration in numbers and health of the descendants of native born Americans. Perhaps no other subject of modern medical discussion, not even the "germ theory" nor the New York Code, has called forth a wider variety of views than this, and it is a pity that a subject of such importance, so well deserving profound thought should have been treated so superficially and intemperately as this has been.

The blame has been laid everywhere, prejudice being a powerful factor in influencing opinion, and no thoughtful reader can go dispassionately through the representative papers upon this subject without feeling that conclusions have been drawn at random from very weak and insufficient evidence.

One very simple way of accounting for the decrease in native population in the United States persistently advanced has been the determined effort of American women to avoid by foul means the legitimate increase of family—the principle evidence offered being the greater fecundity of British matrons than of our own. Since the two races are of common descent, if American women have fewer children than their British sisters, the reason must be that the mothers of our own land are guiltily practising sinful meth-

ods of preventing additions to our population—the assumption being that foreign womanhood is free from this sin. Therefore the responsibility for small families in America must lie with our unwomanly country-woman, who destroy the little lives God would give into her keeping and who should be held responsible for those foul vampires—the abortionists—who exist only to supply her demand.

Such superior maternal feeling and morality being urged for English matrons, a reader fresh from the perusal of this diatribe is struck by surprise at seeing in a late number of the *British Medical Journal* that the conviction and punishment of certain practitioners for producing abortions is “most timely, since it has been heretofore utterly impossible to bring to justice these swarming medical vermin who minister to the wicked purpose permeating the minds of English women, and which, like a foul canker, is *poisoning the universal social system* in these islands.” Now if the opinion of one enabled by long experience and wide practice to judge correctly is of any value we must admit that American germicide and infanticide do not furnish the reason for the relative difference in the birth-rate of these two nations of one family.

That close student of nature, John Burroughs, has furnished to the *May Century* an interesting communication upon “British Fertility,” in which he proves by numerous statistics that the fecundity of England is not confined to the human race, but that all living creatures down to diminutive vermin and insects show exactly the same peculiarity of rapidity in multiplication there as does man, and in a like proportion greater than in our own land.

He speaks of having noted at home in America, ant-hills “that would fill a cart-box,” but they were “like empty tenements” compared with these. The comparative number of the eggs in the birds’ nests was equally significant. The common wren identical with our winter wren, lays upward of twenty eggs, while ours lays from five to six; in fact, the average number of eggs in the nests of English birds is ten or twelve; in American nests, the highest

number laid by a majority of our birds is five! Only the American quail is more prolific than its British cousin. The British rabbit breeds five times more a year than does ours, producing almost invariably eight young at a litter. It is considered in England a fair calculation that one pair of rabbits will in the course of four years multiply to one million, two hundred and fifty thousand!

He says—"There seems to be a push and heat in animate nature there, to behold which is a new experience. It is the Old World, and yet it seems the New in virility and hardihood of species."

Why shall we not as justly impute criminal practices to American ants and rabbits as to women because, forsooth, their fecundity falls below that of the British Isles, or mourn over the moral degeneracy and evil heart of the titmouse who shows symptoms of forsaking her proper sphere and perverting the heaven-born instincts of the gentler sex by laying only six eggs, while her English sister flits and twitters over ten!

A recent contribution to this subject appears in a pamphlet entitled, "Deterioration of the Puritan Stock and its Causes," and while its arguments are in various ways far from logical, and its style is wandering (including digressions upon Swedenborgianism, etc.,) still it is an earnest attempt to bring the evils of hurtful and sinful living to the attention of those who otherwise might fail to consider them, and as such we welcome it. Certainly the author's suggestions to girls and women are valuable, and a frank, kindly warning like the one he gives is never out of place. Still his arguments are entirely insufficient to account for the diminishing population.

The subject requires in any one who shall wisely and effectually investigate it, a wide experience, unprejudiced candor, general proficiency in social science, moral purity and the rare faculty of synthetization. The student thus endowed will give his results to a grateful public, who have looked in vain for such treatment of the subject as this.

The woman in a rural neighborhood who gave a wide variety of

reasons for declining to lend her wash-tub was a type of many writers we have had. The tub was full of clothes asoak; the hoops were loose; the bottom was out; it was already lent; in fact she never had had any tub!

Women eat too much; they don't eat as much as they should: they should exercise; our atmosphere and temperament are so different from the English, that our girls must not exercise so much: our women set themselves deliberately to prevent child-bearing; the average woman has children much too rapidly, and imparts thereby delicate constitutions to her daughters: women are allowing themselves to be too much interested in advanced study, they cannot rock the cradle while they peruse Plato; women are too frivolous, they will not have children because they are vain, immersed in fashionable nonsense and giddy with pleasure, a state of things only to be remedied by severe *intellectual* discipline. Listen to the contradictions—a clear case like that of the tub! “Where doctors disagree who shall decide?”

INTESTINAL DIVERTICULUM—OBSTRUCTION OF THE BOWELS.

There is occasionally found on the small intestine springing from its convexity about three feet above the ileo-cecal valve (Hyrtil), a lateral extension of its cavity, or diverticulum; this process of the gut may be four or five inches in length. It is stated to occur not less than once in one hundred and twenty-five bodies, and is a relic of fetal life, being the remains of the vitelline duct. Sometimes there is formed a continuation of the duct to the umbilicus through a fibrous cord, the obliterated distal part of the duct. Other diverticula may be found in other portions of the small intestine, several in the same individual, these are hernias and not developmental relics.

Three cases of death have been recorded as due to obstruction of diverticula. At a late meeting of the Clinical Society of London, a most interesting case of incarceration of the gut, owing to a complication of a diverticulum, was reported. The fibrous continuation of the diverticulum above mentioned, may be freed from its attachment at the umbilicus and after floating with the coils of intestine acquire a fresh union with some part of the bowel itself; under the band thus formed a knuckle of gut may slip and become incarcerated.

The case reported was of this nature: A boy, ten years old, exhibited symptoms of intestinal obstruction; other measures failing, the abdomen was opened and the cause of the obstruction soon found. The constricting band was ligated in two places and divided between, when its true nature was discovered. The boy made an uninterrupted recovery. At the same meeting, a case was described in which a coil of the ileum had passed through the mesentery of the diverticulum.

THE LARYNGOSCOPE AGAIN.

In the *Dublin Journal of Medical Science* for May there appears a communication from the president of the Royal College of Surgeons in Ireland, that fairly invites criticism; it is on the removal of a sewing needle from the pharynx after pharyngotomy.

A large man in robust health had allowed a sewing needle with thread attached, to slip past the fauces into the pharynx, where it lodged, the end of the thread remaining outside the mouth. The eminent surgeon saw the case two days after the accident and after two other surgeons had attempted the removal of the needle in vain. The foreign body was found to be placed obliquely in the pharynx, *above the level of the larynx*, the point being buried in the left arytenoid cartilage, the head in the left palato-pharyngeal muscle. It could be seen with the laryngoscope. The author says, "I endeavored to extract the needle, but without success. I believe I

caught it with a forceps, but it slipped through the blades." The strong black thread still remained attached, and was pulled on without good result. On the following day fresh attempts were made, "different kinds of forceps" having been procured: the needle failed to come away. The patient suffered considerably and could swallow no solids. By this time the needle had become completely imbedded in the swollen tissues, and his sufferings increased in intensity, until his condition became distressing. Attempts to remove the needle by various methods other than by forceps, had been made meanwhile, without success. The needle eventually was removed by cutting into the pharynx from without. Probably most laryngologists will read such an account with surprise. That a straight needle represented in the cut accompanying the paper to be one and one-half inches long, lodged no deeper in the pharynx than the upper border of the arytenoids, easily seen and reached, that this foreign body should not have been removed per os is remarkable, to say the least. The case is reported as having occurred ten years ago, but even at that time difficult operations in the larynx itself were frequently performed, and as the distinguished author gives the case as illustrative of pharyngotomy, we must suppose that he still regards his failure with the forceps as above criticism. An attempt is described to dislodge and depress one end of the needle by an ingenious use of the thread and a perforated catheter. From the statements made that forceps suitable to the case were borrowed and otherwise procured, we may reasonably conclude that the operator was not accustomed to their use, and consequently that the most skillful manipulation was not employed. It is difficult to believe, after most careful reading of the communication, but that the needle should have been extracted by the natural passages and the very serious operation in the neck avoided. A firm grasp by a trained hand on the exposed part of the needle with suitable roughened forceps, might have worked one end out of the soft parts and so made extraction easy; nothing in the paper suggests any obstacle to such a manœuvre. In the last number of

the COURIER occasion was taken to point out the fact that the profession has not yet allowed the laryngoscope and its instruments the position in practise it should occupy.

NEW OPERATION FOR THE RELIEF OF CANCER OF THE RECTUM.

At a meeting of the Société de Médecine of Lyons in May, M. Maurice Pollosson read a paper in which he proposed a modification of the operations hitherto practised for the relief or cure of cancer of the rectum.

The establishment of an artificial anus as a palliative measure has long been recommended and practised. By this means the irritant effect of the fecal matter upon the cancerous mass is prevented; the patient is relieved from much suffering, and the cancerous mass being freed from irritation, grows less rapidly.

M. Pollosson adopts this procedure in a modified form as a preliminary step in his plan for radical treatment of this affection. He selects the left iliac region as the site for the operation, because there more readily than in the lumbar region can he close up the lower segment of the bowel, which he regards as a point of essential importance in the operation. This he does by invaginating some millimetres of the lower free end, after dividing the bowel clean across, and obliterating the opening completely by means of five or six cat-gut sutures which thus bring into close apposition the serous surfaces. The artificial anus is completed by suturing it carefully into the wound.

After the patient has recovered from this operation, he proposes to extirpate the cancerous mass which, by virtue of the preliminary operation, is practically removed from its relations as a part of the digestive tract and converted into a pelvic tumor. Operating under the conditions so brought about, it is possible to apply the principles of antiseptic surgery much more thoroughly and efficiently than in the condition existing without such a preliminary operation.

In most cases he believes that it would be advisable to allow the patient to recover from the effects of the first operation before performing the second, though he thinks that circumstances might be such as to make it better to go on at once and extirpate the cancerous mass at once after establishing the artificial anus.

CITY GRAVE YARDS.

In a late number of the *London Lancet*, it is stated that it is proposed to erect dwellings for the housing of four hundred persons on a disused cemetery within the city of London. A trench dug in the place disclosed, within about four feet of the surface, a mass of coffins laid side-by-side and piled closely on top of one another, about eight bodies resting in each grave. The interstices of this ghastly mass are filled in with a tenacious, clay-like soil mixed with organic matter to saturation. An awful stench arose from the digging. Yet it is actually proposed to build houses for the living in the midst of this putrefaction and poisonous exhalations. It is intended to cover the site with a bed of concrete as a foundation for the dwellings.

With our present knowledge of virulent diseases, with the published results before the world of investigation into the nature of infectious microcosms, it seems inconceivable that such an outrage as this could be permitted in an intelligent community. But, nothing is so cheap as human life. Darwin has proven that the mould of the earth's surface is constantly worked over to a considerable depth by worms, that bring to the surface the fatal organisms interred with those dead from their agency; thus resurrected they are lifted with the atmosphere to seek fresh prey and incite anew epidemics. It is questionable whether a bed of concrete, with its porosity, and possible crevices, would insure against the appearance of disease among those living in the basements of houses superimposed.

The modification of theological dogmas; the ever-extending knowledge of hygiene; the less sentimental views respecting the

disposal of the dead by sepulture, all these influences combine to favor the adoption of some mode of putting away the dead that will not involve constant peril to the living. Of all methods, so far suggested, that of cremation, properly conducted, best fulfills the requirements of decency and health. Existing grave-yards saturate the soil with disease, poison the water channels through their drainage, and infect the air with exhalations and invisible seeds of epidemics.

A STRANGE LAW SUIT.

A cause célèbre has for some time held the attention of the profession in London: Two physicians in attendance upon a child suffering from diphtheritic croup found it necessary, as a last hope, to perform the operation of tracheotomy. They called upon the father to suck the tube and thus insure the life of his child. Subsequently the father brought suit against the physicians for having imperilled his life, they not having warned him of the risk he incurred. Their defense was that they had given other warnings of the probably infectious nature of the case, and trusted to the father's intelligence. After failing in his suit twice, the man brought a third before the Lord Chief Justice, Coleridge. Lord Coleridge condemned the suit as unnatural, that a father should refuse to take a risk to save his child's life. The jury, also, in giving verdict for the medical men, remarked, "What father in the world would not have done it?" This case is, of course, in some respects, an extraordinary one, but it warns physicians of the grave responsibilities that continually surround them, of the caution that must attend their actions, even when caution would not seem indicated. In connection with doctors' law suits, good advice has been given to the effect that when a debtor seeks to evade payment of his bill by threatening suit for alleged malpractice, the physician should immediately sue for the amount; rather anticipate his opponent in the resort to direct attack.

BOOK REVIEWS AND NOTICES.

INSANITY ; ITS CAUSES AND PREVENTION. By HENRY PUTNAM STEARNS, M. D. *New York: G. P. Putnam's Sons.* 1884. 8vo.; pp. 250 ; cloth. (J. H. Chambers & Co).

Few diseases excite the interest and curiosity of man more than diseases and disorders of the mind. Not only the specialist is eager to obtain new light and learn of well observed cases, but the practitioner, the educator, the more intelligent lay member of society is equally desirous of learning the laws by which the operations of the mind are regulated in health and disease. This book has been more particularly written for the latter class, it is written in fluent and elegant style. It first discusses the question of increase of insanity and the causes which operate to produce it. Among the means of prevention the author dwells at length on the influence of education, protesting against the system of indiscriminate cramming and overfilling the child's brain with a disconnected mass of facts which it has not time to fully understand. He emphasizes the importance of individuality in giving instruction, of industrial education and special training, the development of the moral faculty and will-power, that is, control over the action of the brain. Finally, he cites many examples of the baneful effect produced by the use of stimulants such as alcohol and tobacco, extending often through several generations. Throughout the book is exceedingly interesting and instructive reading. The print and binding are excellent.

H. W. H.

PRACTICAL HINTS AND FORMULAS for Busy Druggists. Original, contributed and compiled. By BENJ. LILLARD. Vol. I., Part I. *New York: J. H. Vail & Co.* 1884. 8vo.; pp. 80; cloth. Interleaved. (St. Louis: J. H. Chambers & Co).

This volume is compiled for the use of druggists, preserving in a permanent form practical formulæ and hints which have appeared in various pharmaceutical and medical journals.

The compiler purposes the preparation of a similar volume early

in each year from material gathered during the preceding one. They will doubtless be of considerable value to those for whose benefit they are prepared.

VETERINARY MEDICINE AND SURGERY in Diseases and Injuries of the Horse. Compiled from standard and modern authorities and edited by F. O. KIRBY. Illustrated by four colored plates and one hundred and sixty-eight wood engravings. *New York: William Wood & Company, 1883. 8vo.; pp. 332; cloth. (Wood's Library).*

As every physician has or expects to have one or more horses, it was a happy thought to introduce into "Wood's Library" a volume devoted to Veterinary Medicine and Surgery.

The volume in hand is a thoroughly practical one; and, by means of its instruction, the physician will be able to better care for his equine servant when suffering.

It is well prepared and forms a valuable number (the last) of the Library, for 1883.

ELEMENTS OF MODERN CHEMISTRY. By ADOLPHE WURTZ. Second American Edition. Translated and edited, with the approval of the author, from the Fifth French edition. By WM. GREENE, M. D., etc. With one hundred and thirty-two illustrations. *London and Philadelphia: J. B. Lippincott & Co. 1884. 12mo.; pp. 770; cloth. (St. Louis Stationery and Book Co.; J. H. Chambers & Co).*

This volume has been adopted as a text-book of chemistry by the Medical Department of the University of Pennsylvania and the Woman's Medical College of Philadelphia.

In addition to his able translation of the valuable original work, Dr. Greene, with full permission of the author, has re-classified the metals in accordance with the theory of atomicity which is now generally accepted. Some other additions to the original text are given, viz., a chapter on chemical energy and a history of Mendelejeff's periodic law. It is an admirable treatise on modern chemistry and both author and translator have done their work with great ability.

THE URINE IN DISEASE.—This is a chart arranged by Louis Lewis, M. D., M. R. C. S., and contains in form convenient for reference the common tests that are of use to the physician in his examinations of urine for the presence of albumen, sugar, bile, excess of phosphates, excess of urea, and excess of uric acid. Hints are also given for treatment of various abnormal conditions. The

chart is published as a supplement to the *Medical World*, of New York, and is given with that journal for each annual subscription of one dollar.

HEALTH HINTS FOR TRAVELERS. By JOHN C. SUNDBORG, M. D. *Philadelphia: D. G. Brinton.* 1884. 12mo.; pp. 61; cloth. (St. Louis: J. H. Chambers & Co.)

This little volume is admirably prepared for such use as is indicated in the title. The "hints" are simple, practical and reliable; and the work is one that we can safely commend to patients or friends who are planning extensive travel.

YEAR-BOOK OF MEDICAL PROGRESS.—SURGERY. Edited by CHARLES H. KNIGHT, M. D.; 8vo. pp. 197.; cloth, \$1.50.

THERAPEUTICS. Edited by ROYAL W. AMIDON, M. D., 8vo., pp. 250; cloth, \$1.50. *New York: Geo. P. Putnam's Sons.* 1884. (St. Louis Stationery and Book Co.; J. H. Chambers & Co.)

In these two volumes, the editors attempt to give condensed reviews of some of the most important contributions to the two departments of medical science mentioned in the respective titles.

They appear to have shown good judgment in selection and editorial skill in condensation of the more important articles which have appeared in the leading medical journals.

The publishers have prepared the volumes in excellent style.

BOOKS AND PAMPHLETS RECEIVED-

Practical Hints and Formulas for Busy Druggists. By Benj. Lillard, Vol. I, Part. I. *New York: J. H. Vail & Co.,* 8vo. pp. 80. cloth.
—How to Grow Fine Celery. By Mrs. H. M. Crider. *York, Pa: H. M. Crider.*
—Some Recent Theories Regarding the Pathogeny of Sympathetic Ophthalmia, viewed from a Macroscopic Standpoint. By Samuel Theobald, M. D., (Reprint from the *Archives of Ophthalmology*).
—Twenty-Third Annual Report of the Cincinnati Hospital. *Commercial Gazette Co.*
—Post-Nasal Catarrh and Diseases of the Nose Causing Deafness. By Edward Woakes, M. D., Illustrated with wood engravings. *Philadelphia: P. Blakiston, Son & Co.,* 12mo.; pp. 224, cloth, \$1.50. (St. Louis: J. H. Chambers & Co.)
—Therapeutischer Almanach, 1884. *Bern: K. Schmidt.*
—Mental Diseases. By T. S. Clouston, M. D., *Edin.; F. R. C. P. E.* *Philadelphia: Henry C. Lea's Son & Co.,* 8vo.; pp. 550, cloth, (St. Louis Stationery and Book Company.)
—Sexual Neurasthenia. By Geo. M. Beard, A. M., M. D. Posthumous manuscript edited by A. D. Rockwell, A. M., M. D. *New York: E. B. Treat.,* 8vo.; pp. 270, cloth, \$2.00. (St. Louis: J. H. Chambers & Co.)

REPORTS ON PROGRESS.

OBSTETRICS AND GYNECOLOGY.

Ovariectomy on a Youthful Patient.—DR. ALEX. J. STONE, of St. Paul, recently made an ovariectomy which in some respects is specially remarkable. The patient was only fifteen and a half years of age and appeared even younger, the breasts being flat and the pubes destitute of hair. Three years ago her abdomen began to enlarge and a diagnosis of ascites had been made repeatedly. Her general health had been excellent, she had never been confined to her bed for an hour, nor had she been prevented by pain from work or play with her companions. The girth at the umbilicus was 47 inches and the tumor crowded the stomach and thoracic viscera above the sixth rib.

On making the usual short section in the median line, recent and old adhesions were found everywhere, anteriorly and laterally. The tumor was tapped and a considerable quantity of dark grumous fluid was evacuated. The incision was then enlarged so as to admit the hand; and then the adhesions were separated or divided. The pedicle, which proved to be a very small one, was ligated, cauterized and dropped into the cavity. The bleeding points of adhesion were ligated or cauterized, the "toilet of the peritoneum" was carefully completed in all its details, and the incision closed with silk sutures, a double current silver catheter being inserted at the lower angle for drainage and a Lister dressing applied. Though the symptoms of shock during the latter part of the operation and immediately subsequent to it were very pronounced, the patient rallied after a few hours, and her progress to recovery was rapid and uninterrupted.

Besides the youth of the patient, the relative weight of the tumor to that of the patient was remarkable. The fluid contents of the tumor weighed fifty-seven pounds, and the solid portion weighed twenty-four pounds, eight ounces and two drams, the total weight amounting to a little over eighty-one and a half pounds,

while the weight of the patient after the removal of the tumor is estimated at between fifty and sixty pounds.—*N. W. Lancet*, April 1884.

A Year's Work in Ovariectomy.—DR. WM. GOODELL reports his work in ovariectomy during the year 1883 as embracing twenty-five completed operations with seven deaths. In one other case an operation was commenced, but on opening the abdomen it was found that the cyst was adherent to every organ that it touched, and sprung from a cancerous mass involving all the pelvic organs. Of course the operation for removal was abandoned. The patient died in a few days.

Four of the completed ovariectomies were made at Dr. Goodell's private hospital. One of these terminated fatally by the bursting of a pelvic abscess into the bladder. Eleven of the operations were made in the hospital of the University of Pennsylvania. One death resulted from hospitalism. Ten cases were operated upon at their own homes, and of these five died. These patients were operated upon by Dr. Goodell, but were attended before and afterward by other physicians.

Three of the seven fatal cases were ill from septic fever caused by purulent cysts at the time of the operation. In two the cyst walls had broken down from previousappings.

Dr. Goodell calls attention to the fact that he has not selected his cases, but has never refused to operate on a woman, no matter how slim her chance of recovery.

Dr. Goodell advises against tapping ovarian tumors, and also against waiting until they attain great size before removing them.—*Med. News*, Feb. 16, 1884.

Extra-Uterine Pregnancy, Laparotomy.—M. CHAMPIONNIERE presented before the Paris Surgical Society photographs of two fetuses which he had removed by laparotomy in two cases of extra-uterine pregnancy. Both women had fever, emaciation, and all the symptoms of hectic. The one had been pregnant fifteen months; the fetus was found floating freely in a purulent cyst. The other woman had a pregnancy of twenty-six months; the fetus was adherent to the walls of the cyst and could in part only be separated with difficulty; a leg and foot was left behind. Recovery took place in both cases without increase of temperature, and was complete in one; in the other a fistula persisted. Both women have menstruated since the operations.—*Gaz. Heb.* No. 3, 1884.

SURGERY.

Treatment of Chilblains.—DR. FR. EKLUND says that in the treatment of chronic chilblains, characterized by discoloration, swelling and anesthesia or hyperesthesia of the part affected, he has found both local and constitutional treatment necessary.

The local treatment consists of topical applications, water, massage, electricity, etc. He recommends the following as an application:

R	Pulv. camphoræ,	-	-	-	-	-	1 part.
	Balsam. Peruvianæ,	-	-	-	-	-	4 parts.

M. Sig. Apply night and morning a few drops on a pad of carbolized cotton batting, fitting the part.

Each morning the feet are to be bathed in cold water (60° to 70° F.) ankle deep, for about four minutes. During this time each foot should be rubbed and kneaded for about a minute, and again after drying them thoroughly with a coarse towel. About an hour after each bath electricity should be applied, galvanic or faradic.

If ulcerations be present they should be treated daily with a saturated solution of carbolic acid in alcohol, or the following ointment may be applied:

R	Argent. nitrat.,	-	-	-	-	-	grs. xv.
	Balsam. Peru.	-	-	-	-	-	grs. lxxv.
	Vaselini,	-	-	-	-	-	℥v.

M. Sig. Spread on carbolized cotton and apply twice a day.

When syphilis is known or suspected, constitutional treatment should be given with local application of unguentum hydrargyri and unguentum terebinthinæ resinosum. He recommends gymnastic exercises specially selected for the purpose of equalizing the circulation in the extremities, and insists upon perfect cleanliness and hygienic surroundings.

As prophylactic means, he recommends daily or semi-weekly ablutions of the whole body in cold water, keeping the air of dwellings, and especially bed-rooms, pure and not too warm, woolen garments next the skin, and double yarn stockings.—*Therap. Gazette*, April, 1884.

Recently Recommended Remedies in Gonorrhea.—DR. E. L. KEYES having tried several of the modes of treatment of gonorrhea that have been lately recommended, concludes:

1. A mild bichloride of mercury solution irritates the mucous membrane of the urethra more than it seems to irritate an open wound.

2. It appears that an abortive treatment of true gonorrhea is yet to be discovered.

3. The hot water treatment of gonorrhea is unreliable.—*Jour. of Cutan. and Ven. Dis.*, March 1884.

Mineral Wool as a Dressing for Wounds.—DR. DAVID PRINCE states that his attention was attracted to the value of mineral wool as a surgical dressing some six months or more ago. On experimenting with it he found that its absorbent power exceeds that of any other substance with which he is acquainted, and its cost makes it as cheap as any other material.

The poorer and heavier quality, weighing about twenty-four pounds to the cubic foot, costs one cent per pound. The better and lighter quality, weighing about fourteen pounds to the cubic foot, costs three cents a pound.

It can be baked before using in order to drive off any suspected gaseous contamination, and can be made the receptacle of any antiseptic substances. As it has no long fibres it may be necessary for large dressings to support it by cotton, tow or jute.—*Am. Practitioner*, March, 1884.

Cephalhematoma Treated by Aspiration.—DR. PINCKNEY FRENCH strongly advocates the early use of the aspirator (within the first week) in the treatment of cephalhematoma. He regards the practice advised by the majority of "the authorities," viz., to trust the powers of nature to absorb the effused blood, as being inefficient and unsatisfactory, and thinks that the results attained by prompt removal of the blood by the aspirator are such as to encourage the general adoption of that mode of treatment.—*Archives of Pediatrics*, March, 1884.

Peroxide of Hydrogen.—DR. C. E. SHELLY sums up the various uses of the peroxide of hydrogen as being dependent upon its cleansing, antiseptic and painless action upon foul and pus-secreting surfaces.

Its action on pus is specially notable; when the ordinary 10 per cent. solution in small quantity is placed in contact with pus, a brisk effervescence takes place and continues until all the pus is destroyed. This action takes place wherever the contact is effect-

ed, whether upon an ulcerated or inflamed surface or in an abscess cavity.

The application readily suggests itself in the treatment of syphilitic and chancroidal ulcers upon the skin or mucous membrane, of gonorrhea, leucorrhea, otorrhea and purulent ophthalmia, or as a wash for the stomach or bladder in certain cases, or an application to an ulcerated uterine cervix.

It is also regarded as a reliable test for pus in urine where the presence of blood can be excluded.—*The Practitioner*, March, 1884.

Caustic Applications to Hypertrophied Tonsils.—DR. J. J. CHISHOLM suggests a more efficient mode than that usually adopted for the treatment of hypertrophied tonsils.

Calling attention to the anatomical structure of the tonsil, as a spongy gland full of holes, made up of infoldings of mucous membrane, he notes that a probe will enter without impediment into any of these openings in the hypertrophied gland and will sink down into its innermost depths. These convolutions increase immensely the mucous surface of the tonsil and at the same time the nervous supply of this concealed mucous surface is much less than that of the exposed surface, so that caustic applications to the inner surface of the crypts is comparatively painless. He finds the chloride of zinc the most available and least annoying to the patient. His method of making the application is as follows: A piece of wire, the size of a fine knitting needle, is slightly roughened for a half inch at one end so that it may firmly hold a fibre of absorbent cotton twisted upon it. This cotton wrapping will hold enough of a saturated solution of chloride of zinc for application to one of these crypts to the very bottom of which the wire is introduced. After being allowed to remain for several seconds it is withdrawn and the whitened orifice alone marks to the eye the effect of the cauterization. The cotton is withdrawn upon the probe and not left in the tonsil. He states that by renewing the cotton for each follicle several may be cauterized at the same sitting without any annoying irritation to the throat. A very few applications will cause the gland to shrink.

Theoretically this mode of treatment would commend itself to the consideration, and Dr. Chisholm's experience verifies the theory as being thoroughly practical.—*Va. Med. Mo.*, April, 1884.

GENERAL MEDICINE AND THERAPEUTICS.

Supposed Stricture of the Intestine Due to Pressure of Entozoa.—DR. E. WAUGH reports an interesting case of obstruction of the colon resulting in spontaneous cure, and due to ascarides. A man aged 50 years, in good health, suddenly was taken sick with swelling and pains in the abdomen; the bowels had not been evacuated for twenty-four hours; large purgative doses had no effect. Opium and injections afforded relief; but on the sixth day there appeared a swelling and redness in the left loin, which led to a spontaneous opening with escape of fecal matter. Upon cleansing the abscess a movement was observed at the bottom, whence were removed five ascarides. The perforated intestine then closed without further disturbance.—*Brit. Med. Jour.*, Nov. 17, 1883.

Ergot in Whooping Cough.—DR. JNO. DEWAR states that he has for several years used ergot in the treatment of whooping cough, and that it seldom fails to cure in two to three weeks, unless complicated with bronchitis or bronchial catarrh. He gives five to fifteen minims of the fluid extract every three or four hours, according to the age of the child or the severity of the cough. The benefit of the ergot is at once apparent in diminishing the frequency and severity of the paroxysms. He administers it alone with sugar, or mixed with glycerine. It may be combined with other remedies, as the compound syrup of the phosphates, when there is debility.—*Therap. Gaz.*, April, 1884.

Palatable Prescriptions.—DR. JNO. L. DAVIS suggests the following as eligible formulæ for the prescription of certain drugs that are disagreeable or nauseous in taste:

1. Bitter drugs. The type of these is found among the cinchona bark alkaloids. The best formula for masking quinine he gives as follows:

R̄	Quiniæ sulphatis,	-	-	-	-	-	3ss
	Tr. aurant. cort. recent.,	-	-	-	-	-	3ij
	Ext. glycyrrhizæ fl.,	-	-	-	-	-	3vj
	Syr. simplicis,	-	-	-	-	-	3j M.

He also commends the "tasteless cinchonia" combination suggested some years ago by Dr. Ashurst, viz.,

R̄	Cinchoniæ,	-	-	-	-	-	gr. j
	Sach. lactis,	-	-	-	-	-	grs. iv
	Sodæ bicarb.,	-	-	-	-	-	gr. 1/10

The cinchona alkaloids and their salts may be given also advantageously in elixir of taraxacum. Finally, it may be said of these, as of all disagreeable medicines, that if taken very cold, or if a piece of ice be taken into the mouth immediately before the medicine, the unpleasant taste will be less marked.

2. Salty and Metallic Drugs.—A large class of unpalatable drugs is included under this head. Dr. Davis regards this as the pleasantest prescription containing iodide of potassium:

R̄ Potassii iodidi,	-	-	-	-	-	-	℥ij
Tr. aurant. cort. recent.,	-	-	-	-	-	-	℥ij
Ext. glycyrrhizæ fl.,	-	-	-	-	-	-	℥i
Syr. simplicis,	-	-	-	-	-	q. s. ad.	℥iij

For this combination, of which each teaspoonful contains five grains, Dr. Davis gives credit to Mr. J. H. Eichberg, druggist of the Cincinnati Hospital. The same vehicle may be used for exhibiting the bromides.

Iodide or bromide of potassium or salicylic acid may be given in milk to the amount of ten grains in the ounce. He also refers to the method proposed by Dr. Seguin, of administering these remedies in slightly alkaline carbonated water either natural or artificial. Magnesium sulphate, which is so disagreeable to many people, may be given very pleasantly in the following formula:

R̄ Magnes. sulph.,	-	-	-	-	-	-	℥ij
Acidi sulph.,	-	-	-	-	-	-	gtt. v
Glycerinæ,							
Aquæ,	-	-	-	-	-	-	aa ℥i M.

Half of this in a glass of water constitutes a very agreeable dose. A drop or two of mint makes it more palatable to some tastes.

3. Astringent Drugs.—Tannin is a representative of this class of drugs. The disagreeable taste of these remedies may be materially improved by the addition of sugar of milk and aromatic powder. When alcohol is not objectionable, the following combination is recommended for the administration of salicylic acid:

R̄ Acidi salicylici,	-	-	-	-	-	grs. viij
Spir. vin. Gallici,	-	-	-	-	-	m. xl
Syr. acaciæ,						
Syr. limonis,	-	-	-	-	-	aa. m. x. M.

[As Dr. Davis has not mentioned any combination of salicylic acid for administration when the alcohol would be objectionable, we suggest the following:

R _x	Acidi salicylici,	-	-	-	-	-	grs. viiss
	Liq. ammon. acetat.	-	-	-	-	-	m. xl
	Syr. zingiber,	-	-	-	-	-	m. xx M.

This is one dose.]

For the administration of chloral he recommends either glycerine alone, or a mixture of that with the fluid extract of licorice.

R _x	Chloral hydratis,	-	-	-	-	-	grs. v
	Glycerinæ,	-	-	-	-	-	ʒi

M. Sig. One dose.

or,

R _x	Chloral hydrat.,	-	-	-	-	-	ʒj
	Glycerinæ,	-	-	-	-	-	ʒij
	Ext. glycyrrhiz., fl.,	-	-	-	-	-	ʒj M.

The same vehicles may be used in giving croton chloral. Syrup of raspberry is also recommended, one dram covering the taste of three or four grains of chloral.

4. Ethereal Drugs.—Syrup of raspberry will mask the unpleasant taste of sweet spirits of nitre. Sulphuric ether is best administered on a lump of sugar; chloroform in an emulsion, or with large quantities of simple elixir.

5. Odorous Drugs.—Carbolic acid is fairly hidden by simple elixir, five grains to the ounce. Creosote may be given with the elixir, or with syrup and wine. The best combinations for deodorizing iodoform are the following in his opinion:

R _x	Iodoformi,	-	-	-	-	-	ʒj
	Nitro-benzol,	-	-	-	-	-	gtt. iij M.

R _x	Iodoformi,	-	-	-	-	-	ʒj
	Ol. myristicæ,	-	-	-	-	-	gtt. ij M.

R _x	Iodoformi,	-	-	-	-	-	ʒj
	Eucalyptol,	-	-	-	-	-	gtt. iv M.

6. Oils.—Castor oil is most easily given with an equal amount of glycerine and a drop of oil of cinnamon to the ounce. [It is claimed that the addition of glycerine not only makes it more palatable, but also more efficient.]

One of the easiest ways of administering cod-liver oil is with the yellow of an egg, a drop or two of an essential oil, and half a glass of sweetened water.—*Cinti Lancet and Clinic*, May, 3d, 1884.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL
SOCIETY.

Stated Meeting, May 15, 1884—DR. PAPIN, President, in the Chair.

PUERPERAL SEPSIS.

(Discussion of Dr. Ford's Paper. Vid. May and June COURIER).

Dr. Engelmann.—I think there are some points in the paper which it would be well to follow more generally. The rules laid down by Dr. Thomas are a little too strict for general observation, and are probably unnecessary, unless for particular reasons; but I have always ordered a mixture of carbolic acid, glycerine and alcohol or of iodoform and carbolized vaseline, when I expect to attend a patient in labor. I think it is, as Dr. Ford says, as easy to use some of these preventives as not to do so. We have to use the napkin and wash our hands and keep the patient clean. Why not, therefore, in these cases, use non-irritating antiseptics? It is certainly harmless to do so, not troublesome, and I do believe saves the patient from possible dangers. I must say that I have never had a case of true puerperal fever or any fever of a serious character in labor cases, whether I have used antiseptics or not. Lately, within the last two years, I have always used antiseptics in the way recommended, washing my hands in carbolic acid, seeing that the genitals were kept perfectly clean, and giving one or two injections during labor of warm water with carbolic acid. Sometimes when the parts are rigid, I prescribe injections of flax-seed tea, to which it is just as well to add an antiseptic. I do believe that the cleansing of the parts with an antiseptic after labor is always desirable, even in ordinary cases. I have not used intra-uterine injections. I have made vaginal injections however, washing with an antiseptic instead of pure water, and generally placing a tampon in the vagina, as there is always some laceration, some amount of tearing in the perineum

or cervix. The advantages of this treatment are evident where sepsis is threatened. It is not always evidently useful, but there are not many better ways of avoiding danger. In cleanly houses we have no reason to expect puerperal fever or infection, but, through visitors or children, there is a possibility of contact with scarlatina or diphtheria. As these possibilities always exist it is as well to guard against them in a harmless way without overdoing the matter; positive good may thus be done.

I remember a case in which I had sewed up the vagina and perineum thoroughly. The patient was so near the menopause that I saw no reason to make a partial operation, and not only united the perineum, but united the vagina to the cervix, and narrowed the vagina so much, that Dr. Prewitt, who was kind enough to assist me in the case, remarked that I had better be careful or I would submit myself to a law suit; and I removed two of the uppermost stitches after that remark. The reason for this extensive narrowing, I may say, was that the patient had been unable for years to walk more than a square or so at a time, and I wished to restore her to perfect health. I wished to make a stout perineum and strengthen the vagina so as to support the uterus. Still, after Dr. Prewitt's suggestion, I removed the two uppermost stitches, but the wound united so that it left a very narrow vagina and a very narrow vaginal outlet. The patient went to Carlsbad and Kreutznach after the operation and was restored to perfect health. She conceived, and one year after the operation was delivered. It was a breech presentation of a very large child, which had been dead before the breaking of the waters. It was putrescent, the skin coming off. The child was forcibly dragged not through these united parts, but through an opening which I was obliged to make. I cut down into the vagina its entire length and deep into the perineum. This, however, was not sufficient, and, as the child was delivered, the septum and perineum were torn still further, and the putrid child was dragged through this large lacerated opening. The labor, which was a very severe one, caused the patient to become greatly weakened, and we certainly had every reason to dread sepsis, because this septic matter was forcibly pressed into the lacerated tissue. I used the hot antiseptic intra-uterine douche and kept this up for a week, following it with the use of iodoform extensively upon those lacerated surfaces, and the

patient recovered without a rise of temperature. Now this was a case in which antiseptic precautions were necessary, I think, and in which they were effective. Usually I presume they are not necessary, but the above case is certainly an example showing their utility and the certainty with which we can prevent infection. We certainly have fewer accidents when they are used, and the patient is more certain of a good getting up. I believe that even if fever is not prevented, as well as when no fever is threatened, the results are better, and I also believe that if thorough cleanliness is observed, the patient will have a better getting up than otherwise, even if antiseptics are not used. I certainly think that Dr. Ford's paper was in the right direction in urging the constant exercise of such precautions.

Dr. Prentiss.—There is still a strong disposition upon the part of a great many to sneer at antiseptics, Listerism as they term it. Now I take it that there are very few rational practitioners nowadays who do not use antiseptics in some shape, even of those who inveigh against the use of antiseptics and antiseptic surgery. There are but few surgeons who will undertake any sort of operation of a grave nature without using antiseptics in some shape. They would not risk their own reputations and the recovery of their patient by omitting to do so, as antiseptics are usually conceded to be valuable in guarding against poisoning of the blood. It seems to me that if there are any of our patients whom we should take especial pains to protect, it is the poor woman who is fulfilling the highest function of her existence. Now it may be that the whole benefit which is derived from the use of antiseptics is due to the cleanliness which is thereby produced; but even if that is the case, if it is cleanliness which keeps out the poison that endangers life, we at least produce that result, which is all that is desired. We do not know what in fact it is that produces the poison. Discussions as to the agency of bacteria have still left the question open, but there is no question as to the utility of cleanliness. It doesn't matter whether we use carbolic acid or bichloride of mercury or other disinfectants with the wash. It does not matter provided we get rid of the poisoning that is threatening the life of the patient; but I cannot see that it is possible to be duly careful and particular in the management of a case of labor to guard the poor woman from the dangers that beset her without the use of antiseptics. It seems to me

that there can be no excuse for any one refusing to use the simple precautionary methods that are believed to be of service. There can be no excuse for it. A practitioner may be utterly incredulous as to the value of carbolic acid, iodoform, or bichloride of mercury, but I do not think he has any right, as long as the great body of the profession believe that there is virtue in them, to refuse to use the simple precautions that are advisable under such circumstances. Dr. Engelmann speaks of the case of a putrid fetus. He evidently thought that there was virtue in the antiseptic precautions that he used, and that they prevented the poison in that particular case. Now if there was virtue in those remedies in that case, there would also be virtue in them in other cases; because, as he says very correctly, there is scarcely any case of labor where there is not more or less laceration of tissue. It may be that it is not always observed, the laceration may be very slight, still there is an opportunity for the poison to be absorbed and infection to occur; so that, admitting that there is virtue in any of these antiseptics in any case, it must follow that there is virtue in them in all cases, and that in order to insure the perfect safety of the patient they should be used in all cases. But even if they were utterly useless so far as their antagonism to the septic matter is concerned, an instance of their necessity upon every accoucheur and midwife would be valuable, because it would lead to the requisite cleanliness which perhaps may after all be the great desideratum.

Dr. Engelmann.—I should like to say that in some shape or form it would be very valuable, and practically valuable, if such a paper in a more popular form were disseminated among midwives here. We have all seen how in some cases infection follows in the track of certain midwives. I have seen it once or twice; and I have often heard my father tell how death seemed to follow at certain times, within a month or so, in the track of one midwife. Among the German population here, this is probably more particularly noticed than among the natives; because the Germans employ midwives oftener and it is sometimes the case that one midwife has five or six cases of puerperal fever. I remember some years ago a well known midwife of St. Louis who in a short time had three or four cases. I lost a cousin under her management. Now it seems to me that this may have occurred because she went directly from a patient suffering with septicemia to her next case, and thus communicated the dis-

ease. I do not know that this ever occurs in the practice of a physician. I have not heard of it at least.

Dr. S. G. Moses.—My experience has been more unfortunate. I have seen it in my own practice and in that of others.

Dr. Engelmann.—It may possibly be, I have never observed it, and it does seem to me that it is not necessary, if the practitioner is careful. With the general practitioner, who also attends labor cases, it may be different, because he comes in contact with diphtheria, scarlatina, suppurating glands, etc.; and he is apt to carry infection, but with the midwives it is perfectly remarkable how one case follows another right straight along. Then all is quiet for a year perhaps, when the thing may occur again. I have known midwives to carry permanganate of potash as a preventive. I have advised it because it is the least harmful. I also advise and try to impress upon them the necessity of absolute cleanliness, wearing a washed dress and going in a clean dress to every patient, and using the permanganate of potash for washing the hands every time before making an examination. By using this precaution it is possible to prevent a vast amount of mischief. But I think we have the most decisive proofs here of how the infection is carried from one case to the other and what a vast amount of good antiseptics and cleanliness will do. These midwives in many instances would not believe in cleanliness, and would not make use of it; but if you give them a medicated wash they will see at once that it is a matter of great importance which it is certain should be impressed upon them. Of course it is not necessary to tell this to physicians, at least of the better class, who are fully aware of the necessity of such measures, and naturally observe precautions and cleanliness that will as a rule prevent these troubles, but among midwives it is necessary; and I think we should urge upon them the necessity of constantly carrying with them the permanganate of potash, because it is not so caustic nor so harmful but that it can be carried without fear or injury, is in a convenient shape, and imparts to the water a color indicative of its strength.

Dr. S. G. Moses.—While I agree fully with all that has been expressed with regard to the necessity of antiseptics in the majority of cases, I have unfortunately in my experience found that the utmost cleanliness and care does not prevent the carrying of infection in some cases. This has been impressed upon me not only in my own experience, but in the case of Dr. Hodge, who of all men was most

remarkable for cleanliness. I never knew his hands to be soiled unless he was engaged in an operation, and he had to give up the practice of obstetrics for at least two months from the fact that puerperal fever followed him around everywhere he went. He gave up his practice and left the city to avoid this difficulty; and in my own personal experience I recollect very well that, notwithstanding all the care that I could possibly take, I had to refuse to attend to obstetrical cases for several weeks from the fact that I had two or three fatal cases of puerperal fever, and of course I did not want to carry the disease to other patients, and it seemed to follow in my path. Of course it is necessary to be cleanly, and often necessary to use these antiseptics, but I cannot concede that in every case of labor the use of the highest cleanliness will prevent the patient's infection. The use of carbolic acid will not prevent it in every case, and Listerine does no better. Permanganate of potash is very good, and as an antiseptic I like it better than carbolic acid, because it is devoid of odor. I believe that the odor of carbolic acid in a sick room is disadvantageous. Iodoform is perfectly detestable; it may be a good antiseptic but it is certainly a very bad smelling one. I think when we make use of antiseptics we should try to get those which are not offensive. My favorite antiseptic, which for years I have used extensively, and always for vaginal injections after labor, is the French chloride of soda of Labarraque. It is a very good antiseptic and has very little odor. I am very much pleased to acknowledge that I agree with Dr. Ford fully in his pathology of puerperal fever. His paper covers all the ground; it acknowledges peritonitis as a cause, as well as septic influences. I am inclined to think his paper a very valuable one. I believe that a practical use might be made of it by condensing it a little so as to meet the popular understanding, if it were widely disseminated among the people and midwives. A great many of them are very dirty, and the patients are filthy, and it is astonishing that more people are not sacrificed to these diseases. I recollect in my early practice of obstetrics, which was principally among the lower classes where no attention was paid to cleanliness, where the patients rarely washed themselves and took no precautions whatever, that there were no cases of puerperal fever. It is true this was in the country, and in a very healthy country, too. I remember in attending one woman that I smelt a very remarkable odor in the room, and I said to her, "What is the meaning of this." She says, "O, doctor that is only

my onions. I keep them under the bed so that they will not freeze." They seemed to take no precautions at all, and still we did not have any puerperal fever. It seems to be in cities and in crowded apartments and tenements that the fever is most prevalent. But I think it is going too far to use all the preparations which have been suggested by Dr. Thomas. We should be careful not to carry our precautions to an extreme. I don't think it is absolutely necessary to use antiseptics in every case.

There is one suggestion which I have seen somewhere, that instead of using cloths to receive the lochial discharge, we should use tow, which can be thrown into the fire. I think that it is a very good suggestion, and a very cleanly one. I don't approve of having these napkins about the lying-in chamber.

Dr. Gregory.—I cannot see what objection there can be, a month or a week before labor, to having the sheets intended for use in the confinement immersed in some inodorous antiseptic lotion like boracic acid, and dried. I don't see that this can possibly complicate things much, and I don't see any objection to it whatever. Borax or boracic acid or any of the inodorous antiseptics may be used. Iodoform can be used if you don't care about the smell.

Dr. S. G. Moses.—I don't see any objection to it except the smell.

Dr. Gregory.—I think it would be well if people had some antiseptic in the room like Listerine, to add to the water in which the hands are washed. There is no trouble about this and certainly no objection to it. In my surgical practice instead of using chloroform I use ether. I am afraid to use chloroform, lest if my patient should die, people would say I should not have used chloroform but should have quit it long ago, and accuse me of persisting in the use of a dangerous article. So I make use of ether, that nobody may gainsay the propriety of my practice. I think that this thing that we call popular opinion—popular professional opinion—should be respected, and even an old foggy like myself must feel it incumbent upon himself to do this sort of thing because the people expect it and will not fail to criticise us if we refuse to make use of it.

Dr. Prewitt.—Especially if it is in the right direction.

Dr. Gregory.—As Dr. Prewitt justly says, these women are helpless, and look to us for succor, and it seems to me that every precaution we can possibly take, which we are satisfied is not harmful, we are in duty bound to adopt; I tell you, gentlemen, puerperal

fever is a frightful thing when it once takes possession of its victim, and the chances of recovery from it are very slim indeed. I don't know how to estimate these chances, but I know they are very slender. In this matter there is nothing like prevention.

Dr. Engelmann.—I would say in reference to what Dr. Moses has said upon the subject of puerperal fever following in the track of physicians, that it does so perhaps in cases of general practitioners who are attending cases of diphtheria, scarlet fever, etc., or sloughing glands, abscesses, and such matters in the hands of surgeons. I think investigation of the matter will show that septic puerperal cases are mostly in the hands of general practitioners, and occur where the physician has been one or two days previously in attendance upon some case like those above designated.

Dr. Gregory.—In almost every house we now find some antiseptic, and in a few years they will be in general use.

Dr. Coles.—I think the principle of cleanliness is so entirely self-evident among physicians of the present day it is hardly necessary to say anything in advocacy of a position of that kind. The remark which Dr. Gregory has just made in regard to chloroform and the probable blame which may attach to the physician or surgeon in case he neglects certain precautions leads me to say that we ought to be cautious not to carry our claims too far in these cases. I think that we lay down too much of a routine for the lying-in room, and it becomes impracticable to carry it out without a great deal of inconvenience to the physician and to the patient and to all concerned so that we may possibly defeat our own object. Now, for instance, Dr. Thomas believes in a thorough renovation of the room, but there are a great many people who cannot afford to do this. Of course the first and most important thing is cleanliness. The physician himself ought to have clean hands. He ought to be very careful what he has been handling during the preceding few days; and that there should not be any cadaveric poison about his hands or anything else calculated to excite sepsis. It is also prudent for him to inquire what the nurse has been doing and what care she has been taking of herself. The room and apartments should be made as neat and clean as possible, and all useful antiseptic precautions should be resorted to. One of the most important points, I think, in the management of puerperal cases is to see that the uterus contracts properly, to see that there are no clots left within it. I believe that in the majority of sporadic cases of puerperal fe-

ver, where there is known no epidemic influence at work, the trouble is brought on either by neglect of the necessary precautions or uncleanliness on the part of those engaged in the management of the case—on the part of the physician or nurse. Now in regard to scarlet fever, which has been alluded to here several times, I do not think an obstetrical society ought to lay it down as a dogma that a physician after simply being in the presence of scarlet fever should be required to give up his obstetrical cases. If that be the position which this society takes and is allowed to go forth as true doctrine it would probably lay any physician liable to unnecessary blame for attending a midwifery case after calling upon one of scarlet fever, just as a surgeon may be blamed for using chloroform instead of ether, if death occurs. If a physician should be unfortunate in a case of labor and somebody happened to know that he had called upon a case of scarlet fever that day or within a few days, he might be liable to be severely censured or even prosecuted for doing a thing which is done with impunity every day of the year in St. Louis, and every day of the year by physicians throughout the country everywhere. I think that when assertions are made in regard to matters of that sort, they ought to be accompanied by some little proof that there is really a direct connection between these diseases—that there is a specific connection between scarlet fever and puerperal fever. I have a little book that I took up this evening and looked over just after tea, which is written by Dr. Minor of Cincinnati. The book is bristling with statistics and tables. I have had it for some time, but I never took any interest in it until very lately. But in looking over this book I find that it contains some exceedingly interesting facts. Dr. Minor has gone through the census reports of all the cities and states, and looked up the puerperal fever epidemic statistics, and he has discovered that a number of local epidemics of puerperal fever have occurred in different cities of the Union, and different localities during the years between 1850 and 1870; and he has noted the mortality from erysipelas in those same localities, and has proven beyond a doubt that in the periods and localities where there was an epidemic of erysipelas, there has at the same time existed an epidemic of puerperal fever. He has ascertained that to be a fact beyond question in so many different instances, and under so many circumstances, that he has come to the conclusion that there is an interdependence between these two diseases. In the latter part of

the year 1872 and the early part of 1873, in the city of Cincinnati, for instance, there was a frightful epidemic of puerperal fever. It commenced in the month of November, 1872, and there was a marked increase in the number of erysipelatos cases in the city. In each of the localities where erysipelas prevailed, there was a corresponding prevalence of puerperal fever. Some of the physicians in Cincinnati refused to believe that there was any connection between the two diseases, and he went over the mortuary reports for that period and found that those physicians who attended erysipelas and puerperal cases at the same time, almost invariably within a week or ten days wrote a certificate assigning puerperal fever as the cause of death, whereas those physicians who declined to treat puerperal cases when attending cases of erysipelas were much more fortunate in their practice. Now, in regard to scarlet fever the same author instituted some researches in this direction also, and he everywhere found that there was no such interdependence as has been stated. In Cincinnati in the latter part of 1873 and the early part of 1874 there were about eight hundred deaths from scarlet fever, there being a frightful epidemic there during that time; and during the period in which the epidemic prevailed there, the mortality from puerperal fever was reduced to fourteen, that is, there were only fourteen deaths during that time. I think this conclusively shows that the assertion which was made by Dr. Braxton Hicks some ten or twelve years ago, that there was something in the scarlatinal poison which had a specific influence in producing puerperal fever, has no foundation in clinical facts.

The only way in which scarlet fever can produce puerperal fever is by local necrosis, locally conveyed. Of course if a physician has put his finger into the throat of a child or into the mouth where necrosis exists, and the necrosed matter is carried under the finger-nails or on the hands and then goes and attends a patient in confinement without properly cleansing his hands, he would lay himself liable to convey a septic principle; but that there is any specific sepsis in a scarlet fever case, I do not believe, or that a man by simply going into the room after having attended a scarlet fever patient can communicate puerperal fever, I do not think is sustained by any evidence at our command. If there is anything in it, I think we ought to know it; and if there is nothing in it, we had better come to some understanding about it; otherwise we are liable to get ourselves into serious trouble, and possibly into a suit for malpractice.

Dr. McPheeters.—I think the paper of Dr. Ford and this discussion is very timely, and his views on the subject of puerperal fever I think are borne out by the facts. With regard to the subject of antisepticism there is a great deal to be said on both sides. If antisepticism has done no other good than to call renewed attention to what everybody acknowledges to be of paramount importance—thorough cleanliness, it has done great good. We all use antiseptics. I regard water, and especially hot water, as a very excellent antiseptic. But I use other antiseptics besides. There is, however, such a thing as carrying even a good thing too far. I look upon Dr. Thomas' paper recently read before the New York society as an instance of the germ theory run mad, and antisepticism carried to the *reductio ad absurdum*. Truly, as Dr. Gregory says, we have to yield somewhat to popular sentiment. The professional mind, and especially the public mind, is at present thoroughly impressed with the idea of contagion and of infection, and if the use of antiseptics does no other good, it at least quiets the apprehensions of patients, looks scientific, and begets the idea of caution and safety, and therefore it is well to resort to them; but it is wholly unnecessary to resort to all the details to which Dr. Thomas refers. That this is the case is proved by the fact that in parts of the country where these things are not resorted to at all, the death rate will compare most favorably with that of our large cities, where we find these extreme precautions practised; and further, from the fact that eighty and one hundred years ago women were as safely delivered and got through childbirth as well as they do now, to say the very least. You cannot carry cleanliness too far, but I think you may carry antisepticism too far. It may even be carried to a degree when it becomes injurious. If you have the room permeated with irritating substances such as iodoform and strong solutions of carbolic acid, you are almost sure to do harm. You may injuriously irritate the delicate membrane of the lungs or do harm in other ways. Dr. Boisliniere will recollect a case which we saw together a few weeks ago, where we were called to see a case of diphtheria and in which, by the use of slacking lime and burnt sulphur in the room at the same time, the atmosphere was so irritating that we were under the necessity of opening the windows before we could breathe comfortably and without sneezing. That was carrying antisepticism entirely too far. With regard to midwives making use of antiseptics, I think it is very desirable, as they are frequently the cause of pro-

pagating disease by their uncleanness. We must recollect also that puerperal fever is frequently endemic in hospitals, and that it occasionally becomes epidemic in a community; my experience is, that whenever there is an epidemic tendency to erysipelas, there will always be a prevalence of puerperal fever also. I do not believe that there is any necessary connection between scarlet fever and puerperal fever. I do not hesitate to attend patients suffering from the two diseases after taking ordinary precautions. In a practice of 40 years I can say that I have had only two cases of death from puerperal fever, or in parturition from any other cause. I, however, always observed great cleanliness, and wherever the lochial discharge is fetid, or in the least offensive, I use antiseptics, and always the vaginal douche, and, where it is necessary, the intra-uterine douche also. I think there are cases in which all these things are necessary, but they are not required in every case. I am no obstructionist in medicine: on the contrary, I greatly rejoice at the wonderful progress which has been, and is being, made in the profession, and especially in the direction of preventive medicine; but I do not wish to see such an unnecessary and onerous burden as Dr. Thomas proposes, laid either on physicians or their patients, a burden which neither they nor we are able to bear. Dr. Coles has called attention to one source of annoyance to which the profession would be liable in case the necessity of this tedious round of prophylactic treatment should be generally admitted, and it is no imaginary danger either to which he refers. Viewed also from a humanitarian standpoint, this question of contagion is fraught with serious consequences, for, whenever the popular mind becomes impressed with the idea of infection, the fear of personal danger too often leads men to disregard all the claims of humanity, and to turn a deaf ear to the cry of the sick and the suffering, so that the stranger and the friendless, especially, are apt to be deserted and left to suffer and die alone and unattended. We had an illustration of the brutalizing tendency of this kind of fear in the inhospitable treatment received by the refugees from fever stricken districts of the south, during the last epidemic of yellow fever. Almost everywhere they went they were shunned and avoided as though they had been lepers; every door was closed against them, and, in very many instances, to the disgrace of humanity, they were denied food and shelter. How different all this is from what it formerly was. For some years immediately preceding the late war, I was surgeon

to the United States Marine Hospital, of this city, and during that period whenever yellow fever prevailed in New Orleans, marines and others who were stricken down with the fever on their way up the river on board of steamers were brought to our wharf without let or hindrance, and on their arrival they were quietly transferred to the Marine Hospital—in some instances they were placed in wards with other fever patients. Some of these cases proved fatal, while others recovered; but in neither event without attracting public attention, and *in no single instance* did the disease spread, and no one in or out of the hospital was any the worse for the presence of these imported cases of yellow fever. Were such a thing to occur now, how very different would be the result? The boat would be duly quarantined (which, perhaps, would be well enough) the unfortunate patients would be hurried off to the pest house, the newspapers would teem with sensational articles—multitudes would flee the city, and a general feeling of alarm would pervade the whole community. And yet yellow fever was as contagious then as it is now—the only difference being that the popular mind was not crazed on the subject of contagion then as it now is. This is progress with which, I confess, I do not sympathize.

Dr. S. G. Moses.—I saw in a journal lately that there have been two deaths produced by the poisoning of corrosive sublimate, one to 1500 parts, in some German hospital.

Dr. Boisliniere.—I fully indorse all that Dr. Ford has said. I do not indorse the excessive craze about antiseptics which some have indulged in, but I think we should recommend thorough cleanliness in all cases. A very good antiseptic which is often forgotten is water. It is one of the best antiseptics. It is true it is a very old one and not mentioned much, but the use of very great quantities of water is an excellent thing. It seems that while we are thinking of the subject of antiseptics we forget the commoner antiseptic which is so necessary for the recovery of the patient. We should be very careful to state our position. There is a danger which has been alluded to by Dr. Coles and also by Dr. McPheeters that we may be misapprehended about the use of this corrosive sublimate. It has been recommended in the proportion of one in 2000 parts, so that a quart of water would contain $7\frac{1}{2}$ grains of corrosive sublimate, that makes one part in 2000.

Dr. Prewitt.—That would be half a dram to a gallon.

Dr. Boisliniere.—In making a vaginal injection the vagina will

retain after the injection at least four or five ounces of water, especially if the patient is in the recumbent position. Now these four or five ounces of water will contain two grains of corrosive sublimate. This quantity is retained there. Then it is possible for the surface of the vagina to absorb these two grains of corrosive sublimate, and you can readily see the danger of the use of this very poisonous substance. I use corrosive sublimate externally myself on the genital parts in a moderate amount, placing it upon a cloth, and I like its effects very much. Antiseptics are not absolutely necessary in every case of labor. The great majority of cases of labor will get along without their use. Nine-tenths of the cases perhaps will come to a happy termination without the use of any antiseptic. To be sure thorough cleanliness should be used in every case, and all the laws of hygiene be carefully followed. I believe, as has been stated, that we should be very careful in concluding that there is a connection between puerperal fever and scarlet fever. It is time, I think, to enter a protest against connecting diseases without special proof, because the papers will take hold of it and people will be apt to censure physicians or even bring suit against them in cases such as have been referred to here to-night.

Dr. Ford.—I am fully impressed with the importance of the remarks which have been made in regard to the caution to be exercised in assuming a causative connection between scarlatina and septicemic diseases, and highly appreciate what has been said in reference to the use of antiseptics in labor. Dr. Thomas advocates the adoption of very stringent measures, and I do not know that, in the absence of epidemic influence, it is necessary to go quite as far as he does; but what I would like to accomplish would be to secure the benefit of antiseptics in an inoffensive way, so as to realize all the good possible without exciting the apprehensions of the patient, while still avoiding certain unfavorable results sometimes attendant upon the use of antiseptics, especially to the uterine cavity. Of course we must always take care that our fingers are thoroughly clean, so that we may not ourselves convey any septic matter to our patients. We should not go to the lying-in-room after making a post-mortem or after being in attendance upon erysipelas. About scarlet fever there is a good deal to be said on either side. I am not prepared to declare that there is any direct connection by means of a specific contagion between scarlet fever and puerperal fever. There

is a popular apprehension on the subject, which seems to be pretty deeply seated, but it must be borne in mind that sphacelations and suppurations are very frequent in scarlatina, and all such cases furnish transferable septic matter. I think we can accomplish a great deal by simple means. I think we can do a good deal by using sheets and napkins saturated with some unirritating antiseptic and afterwards dried, which will not be offensive in any way. I think that a very good plan is to use borated or salicylated cotton for absorbing the lochial discharge from the genitals, because it can be burned or thrown away when saturated, if the antisepticized napkins are not at hand. I would not go so far as to advise that the room be thoroughly renovated, as Dr. Thomas has recommended, except during epidemics, but among people who could bear the expense I should certainly have a new mattress and new bed-clothing so that I might be thoroughly satisfied that there was no lurking septigenous matter present. This may not be absolutely necessary; it cannot be done in every case of labor, but among the better classes I should certainly take this precaution. Where the lochial discharge becomes fetid, I would advise washing out the vagina, and even the uterus, as long as the putrid fœtor persists. Where the cervix is lacerated I have for several years been in the habit of washing out the vagina with a solution of Labarraque's chlorinated solution of soda, which never causes any trouble. I do not altogether like carbolic acid, on account of its irritating properties, its smell and its poisonous properties, if absorbed. Where there are pronounced symptoms of septicemia I wash out the uterus with antiseptic solutions in conjunction with concurrent treatment of a general character.

AMERICAN CLIMATOLOGICAL ASSOCIATION.—The officers of the American Climatological Association for the ensuing year are as follows:

President, Dr. A. L. Loomis, New York.

Vice-Presidents, Dr. F. J. Knight, Boston, Dr. W. H. Heddings, Aiken, S. C.

Secretary and Treasurer, Dr. J. B. Walker, Philadelphia.

Council, Drs. J. H. Tyndale, New York, E. T. Bruen, Philadelphia, E. D. Hudson, New York, Frank Donaldson, Baltimore, Beverly Robinson, New York.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, April 20, 1884. DR. GRINDON in the chair.

ASPERGILLUS NIGRICANS.

Dr. Todd.—I wish to present to the Society a specimen illustrative of a disease that presumably is more or less familiar to all present, and, at the same time, to call attention to a very common but objectionable practice which may give rise to the disease. The specimen which is here placed under the microscope, is the *aspergillus nigricans*, a fungus that gives rise to a very distressing ailment, parasitic otitis. It is a very common practice for physicians to prescribe almond or sweet oil to be dropped into the ear for various disorders of that organ. This oil, of course, must remain in the ear; it macerates the epithelium and so prepares a fruitful soil for fungus germs. This specimen was taken from a case which appeared at the clinic of the Missouri Medical College recently: it exhibited markedly all the symptoms of the fungus otitis. The patient, a middle-aged man, had been suffering from an intolerable itching in both ears. On looking into the ears I found at the bottom of the auditory canal, what looked like a bit of soot. This appearance together with the swelling of the canal and pruritus, at once suggested the presence of the *aspergillus nigricans*. A piece of this blackish mass you will see in this vial floating in diluted glycerine. It consists of the mycelium, or interwoven web of the branching fibres of the fungus, together with epithelium and probably some purulent matter. Under the microscope a very peculiar mass, like the heads of the fructification, are readily seen. This odd form and its black color, give the name. The treatment is simple. We destroy the fungus and the disease disappears. A little alcohol dropped into the ear, or syringing the ear with a solution of borax or boracic acid, will accomplish the desired end. From the fact that the epithelium has been loosened and deeply penetrated by the vegetation, spores become lodged in the lower layers of the cuticle, perhaps enter the follicles, and later set up fresh growth; therefore the case must be kept under inspection for months.

Dr. Leete.—As a matter of fact is not almond oil a very highly stimulating oil?

Dr. Todd.—I don't know. Of course the oil does not evaporate, and it macerates the parts.

Dr. Leete.—Isn't it a very stimulating oil?

Dr. Todd.—I don't know about that.

Dr. Moses.—It is not a very common condition, is it?

Dr. Todd.—It is perhaps a more common one than is supposed

Dr. Steele.—What were the symptoms, itching, etc.?

Dr. Todd.—The only sure determination is examination by the microscope.

Dr. Dean.—I have had some experience with this growth and the use of glycerine. Some few years ago I had placed a specimen of it in glycerine and found that it disappeared. I then concluded to see what became of the specimen and put another in a glass filled with glycerine, and found by observing it that it shrunk up and gradually disappeared.

VOMITING OF PREGNANCY—INDUCED ABORTION.

Dr. Scott.—On the first of January last a gentleman came to my office and requested me to prescribe for his wife, stating that she was suffering from a severe cold. He thought she was bilious, and that she was a little sick at the stomach. I knew her very well and prescribed for her. The next day he asked me to visit his wife as she was no better. She was still suffering with great nausea, and had some fever. Still thinking that she had taken cold, and was bilious, I visited the lady and after talking with her about her case, I told her that she was pregnant. She had been married on the 14th day of November, and this was the 2d of January. After examining her very carefully and getting the history of her condition I had no hesitancy in pronouncing her pregnant, and the nausea the result of pregnancy. She was a young woman, and was at first disposed to pass this as a joke, not thinking that she was pregnant.

I then began the treatment of her case for the nausea resulting from pregnancy. I gave her everything that the art of medicine could suggest, and everything I gave her was rejected without the least of any of it being retained upon the stomach. Whatever there was in medicine that has been used in such cases or recommended I gave her. Everything that I had read of or that I had found from my own experience to be beneficial was tried, but I found nothing to be of any service whatever. I used hypodermic injections of morphine, used morphine in the rectum, used it inter-

nally, used it in small doses and in large doses, used ipecac in small doses and in large doses, and so I ran through the whole materia medica without producing the least beneficial result upon my patient. I must confess here that I was beginning to get very much discouraged with the case myself; and upon one occasion her father met me in the parlor and said, "Doctor, what is the matter here, and what is going to be the outcome?" I said to him very candidly, "Sir, your daughter is pregnant." "Well, Sir," says he, "What is going to be the outcome?" I said, "I have tried everything I can suggest, and there is but one thing to be done, and that is to produce a miscarriage. That is the only thing that will give her any relief whatever." I might say I had dilated the os, I had touched it with iodine, I had touched it with nitrate of silver, and nothing produced the least beneficial results. I told him that it was the last resort, and that I had been trying everything for her within the last two weeks hoping that with the growth of the fetus this nausea would cease. This was one of the most distressing cases I ever saw. I sat at her bedside for twelve and twenty-four hours; and I don't believe that there was an interval of fifteen minutes that there was not vomiting. She vomited whatever I gave her as a matter of course. The father felt a little hesitancy in submitting to such a proposition, but I told him it was the only resort; but, said I, "If you want a consultation, if you want any one else in this matter, have any one you please to see her." Accordingly Dr. Moses and I saw the case together. At first he didn't agree with me as regards her pregnancy. On making a vaginal examination he said that there was parametritis and some inflammation, and that this was probably the cause of the nausea. But in his next examination he was satisfied that she certainly was pregnant. There was some parametritis, which was evidenced by the fixedness of the uterus. She was just married and had taken a long bridal trip and submitting for the first time to the approaches of her husband, there necessarily resulted some slight parametritis.

I had known the patient from childhood, and she had perfect health; she was married November 14th; coming back from a long bridal trip with nausea, with constant sick stomach, it was quite natural to suppose her pregnant. Her head was clear; there was no trouble with the lungs; the kidneys were in perfect condition, I examined her urine; her bowels moved regularly. Now the question was, "What could cause this nausea except pregnancy?"

And this was precisely the ground for my arriving at the conclusion which I did, and this reasoning convinced Dr. Moses, on our second meeting, of the correctness of my conclusion.

I told Dr. Moses in detail what I had been doing, and then we treated her together for a week or ten days; and we could produce no good result. I told Dr. Moses, when he first came to see her, that an abortion must be produced, that it was the only way in which we could produce any good result. The family were exceedingly uneasy about the lady, and Dr. Boisliniere was also called in consultation. He, however, would not consent to an abortion. He proposed to me to try something else and keep trying. He said he had seen a good many of these cases when almost on the verge of the grave recover, and suggested some of the very same things I had used and many others which I had not used. The use of belladonna plaster over her uterus and belladonna suppositories—the belladonna suppositories I had been using. Nothing at all had any favorable effect, so that Dr. Boisliniere finally reluctantly gave his consent to the abortion. Dr. Moses introduced the sound into the uterus and thought he broke up the membranes, but we waited all that day and all that night, and no results whatever followed even the introduction of the sound. I still adhered to my view of the case that she was pregnant and insisted on it, and insisted that we must do this thing over again, in which Dr. Moses agreed with me. The second day after the first trial Dr. Moses again introduced the sound, using Sims' speculum. This was done about ten or eleven o'clock. Again there was no sufficient indication of labor, nausea continuing all the time; and about two o'clock in the morning I had the napkins removed and I found a little stain of blood upon them. I told her mother that she might lie down and rest easily, that it would soon be over. At seven o'clock, on removing the napkins we found the fetus. I don't think she vomited twice afterwards. I afterwards removed the secundines and the patient made a good recovery.

It was on the 26th of January that the abortion was produced. From the very time that the fetus came away her nausea left her. I was satisfied that this was the only thing which would be of any good. This was the third case I have had within eighteen months in which a similar condition of affairs existed, and when I produced an abortion the patients were saved. I felt that I was treading ground that I had gone over before.

Dr. Love.—How far advanced was she?

Dr. Scott.—She was married on November 14th, and thinks she became pregnant on the 20th of November.

Dr. Love.—Was the fetus perfectly formed?

Dr. Scott.—Yes, sir. The first time we attempted to produce the abortion was a complete failure, but I suppose that was owing to the fact that she was exceedingly nervous.

Dr. Moses.—The use of the sound in attempting to produce abortion was the only means taken at first, I had only in one case ever before considered it necessary to produce abortion under such circumstances, and in that case when the sound was passed and the ovum disturbed the nausea was arrested; and although the ovum was not discharged for some twenty-four or twenty-six hours there was no return of the nausea to any extent, and when the ovum was discharged there was complete arrest. I am satisfied that the destruction of the ovum was complete and that its separation being accomplished, uterine action was delayed simply from the fact that the patient was in such extreme exhaustion. It was not until the next day, when a tent was introduced for the purpose of causing more decided uterine action, that there was a discharge of the contents of the womb.

The case was of still further interest from the fact that ordinarily when the vitality of the ovum is destroyed the nausea is arrested promptly. There seems to be a very singular connection between the vitality of the ovum and the reflex neuroses. While the ovum seemed to have been destroyed in this case, vomiting was not arrested except temporarily. The stomach was again quiet for several hours after the fetus was expelled, but before the secundines were expelled there was a return of the nausea which continued until the uterus was entirely emptied of its contents. After that time there was no further trouble.

The question of the propriety of producing abortion under these circumstances has been argued *pro* and *con*. Religious, civil and moral law have opposed and will rightly still continue to oppose the production of abortion under any circumstances; but I am satisfied that under certain conditions there is no other recourse, and that it is criminal to allow a patient to go to the last extremity before an effort is made to produce an effect which we know is certain to relieve her and preserve a life which is "the right of the woman."

Dr. Scott.—I agree with the doctor that this is the last resort, yet I am satisfied that we are justified in producing abortion under such

circumstances. While I certainly would not rashly disturb this little bud of humanity or ruthlessly tear it from its parent stem, yet I know of no law, either human or divine, ecclesiastical or other, that would prevent me from using remedies and means for the well-being of my patient, for the saving of her life. I recognize my position only as a doctor, I don't go to the bedside as theologian or moralist, but as a physician prepared to use every remedy that my mind suggests, irrespective of moral or ecclesiastical laws which govern us in the matter. We are doctors, not ecclesiastics. While I have every regard for a man's religious opinion in regard to this matter, yet I have my own views, and I will not disregard them. I am fully agreed that the production of abortion must be the last resort, but I do not think that we should allow patients to go to the verge of the grave, as this little woman was, without using the remedy which I believe will secure her life. I have done it twice, not ruthlessly; but I felt it was my duty to do it, and I shall always do it under similar circumstances, not ruthlessly or rudely or hurriedly, but when as a physician I am convinced that it is the only remedy which is going to give her any relief.

Dr. Engelmann.—Dr. Scott argues very correctly, but I was hardly aware that it was a question open for argument any longer. It seems to me that this is a settled fact. Of course abortion is to be induced as a last remedy, but it is always to be used in time, and as soon as it is found that all others fail. I think it is only a question of religion, and I believe those physicians who maintain the opposite simply maintain it as a religious matter, not by any means for medical reasons but because their church demands it. It certainly seems proper that this means should be adopted before the patient is in extremity, as I have unfortunately seen in one instance, that, when other remedies have failed and the patient herself is failing, before she is low that the abortion should be produced. I don't think it is an open question at all. I would say one word with regard to the method of producing the abortion. I have found that premature labor is best produced by being inaugurated with the warm douche. By this means we approximate more nearly the condition which we have in labor at term. The os and cervix are softened, and the parts in the same manner are congested and prepared and softened for the coming labor. Whereas in the use of the sound only to dilate the os this preparatory stage is not gone through. I have been in the habit of

using a long piece of slippery elm bark, which is soft and does not absorb, and brings on labor pains in abortion more like labor proper or like an abortion in consequence of natural causes. I find it easier and when once inaugurated more rapid. I certainly think that Dr. Scott's position is a most perfect and correct one. I didn't think it was attacked.

Dr. Moses.—In relation to the method of producing abortion by injections of warm water, that is the best method; but it sometimes happens that that method cannot be used. It was so in this case. The patient was extremely nervous and fretful when I saw her, and whatever was to be done had to be done with as little physical disturbance as possible. It was with great difficulty that we were allowed to touch her. There was a case some years ago here, which I think the doctor will recollect; it was the one which he referred to, I suppose, in which the abortion was produced too late. I agree perfectly with what the doctor said in regard to postponing the production of abortion until it is too late. I think that when all reasonable efforts have been made to stop the vomiting, and before the patient is too far exhausted, the abortion should be produced.

Rectal alimentation was tried faithfully, but it disturbed the patient a great deal and she resisted everything so far as physical treatment was concerned. It apparently had but little effect in sustaining her, though it must have had some. Although the nutritious enemata were administered with the greatest care, the nervous irritation which was finally produced more than counter-balanced the beneficial effects.

Dr. Engelmann.—The case that Dr. Moses refers to was one which has always impressed me, and one which I have frequently thought of. A young lady in the prime of life and a bride greatly admired had become pregnant soon after marriage, and suffered in this way for three months at least. The trouble began moderately, grew worse, was seen by a number of physicians; and when I saw her, she was reduced to a perfect skeleton from a hearty robust young lady. She vomited I presume every five minutes; it was perfectly terrible to be in an adjoining room and hear her constant effort. The vomiting was finally stopped by the application of carbolic acid to the cervix and a tampon of tannin, glycerine and carbolic acid; and it was thought possibly the chances might be better if the ovum were removed. An abortion was brought about

for that purpose in the sixth month, but labor had to be accomplished artificially in every stage and in every sense of the word. The os was dilated first with sponge tents, then with Barnes' dilator. The fetus was removed with the forceps, the after-birth was removed, and contractions were brought on by electricity. The moment after the after-birth was removed the cavity was touched with the sesquichloride of iron, and one pole of the battery was applied to the uterine cavity, the other to the fundus. In this way the uterus was contracted very rapidly. The entire labor was an artificial and a very pretty and perfect one. There was no hemorrhage whatever and vomiting had stopped, but the stomach was not in a condition to receive or retain anything, and she died in some 8 or 12 hours after the abortion was produced. Had this abortion been produced a month before, or possibly a few weeks before, her life would have been saved.

Dr. Scott.—In the case preceding this one upon which I produced an abortion, I broke up the membranes by the introduction of a sound, using, as I always do, a Sims' speculum for the purpose of introducing it into the uterus. I have been very successful in my other two cases, both of whom made very excellent recoveries.

Dr. Todd.—I would like to ask Dr. Scott if this same thing is likely to supervene on a second pregnancy?

Dr. Scott.—We can't tell that. Time will have to decide that question. One of my cases has since become pregnant and is doing very nicely.

CANCER OF BOTH OVARIES.—SUCCESSFUL OPERATION.

Dr. Carson.—I have a specimen here of cancer of both ovaries removed by Dr. Gregory, which I wish to show to the Society, which may be interesting to some of the members present. This lady, aged 54, social standing good, American, lives at Rockfield, Missouri; general health good; change of life occurred at 48 or 49; she has had seven children, no miscarriages. She has had pains for the last two or three years, especially on the left side of the abdomen. This tumor has been noted for about two years. There was slow increase until it was about the size of an orange, moving from side to side, then growing rapidly and becoming less movable, and she had to lie on her back principally. The tumor was most prominent on the left side low down. The measurements then were: Circumference 42 inches, from pubes to umbilicus $8\frac{1}{2}$ inches, from ensiform cartilage to umbilicus 10 inches, right anterior spine to

umbilicus $10\frac{1}{2}$ inches, left anterior spine to umbilicus $10\frac{3}{4}$ inches. At first examination we found the abdomen quite large, as this tumor would indicate, with an irregular surface. There was great difficulty in breathing, and on palpation the wave was distinct over the whole abdomen. Upon examination of the uterus from the vagina we found it perfectly fixed and immovable; through the rectum it felt more consistent than through the abdominal walls. No undue hardness was found either through the rectum or vagina, and a diagnosis was made of a cystic tumor of the right ovary, if I recollect aright, but upon opening the abdomen we found an encysted dropsy, the fluid of which was of a greenish hue which was discharged. This tumor was so fixed that it was with great difficulty that we could remove it. I first introduced my finger behind the tumor and elevated it slightly; Dr. Moses then carried his hand down behind mine. I then forced my finger up behind the tumor and lifted it with some considerable force from the pelvis, and in so doing I tore off this mass which formed a second lobe of the left ovary. The woman made a good recovery and returned home several weeks after the operation, and since her return we have heard from her daughter that she is well and enjoys life; whereas if she had not been operated upon she would have been dead. We also found surrounding the large intestines a growth which we took to be an enlarged gland. The operation was done under considerable difficulties. The ether had to be administered carefully, as the woman's breathing became very difficult. Several times during the operation we injected ether subcutaneously. The pedicles were very short and were with difficulty tied. It was determined on account of the woman's condition not to attempt the removal of the gland which was found surrounding the intestines.

STRANGULATED UMBILICAL HERNIA.

I was called to Illinois some time ago by a dispatch which told me to come prepared to operate upon a very fat woman for umbilical hernia. I reached the place at 11 o'clock at night and was taken to the house of the patient, but as the symptoms were not urgent, I decided to postpone the operation till morning. She gave the following history: For many years she had been subject to the hernia, which came down occasionally, but was easily returned, and at no time had it

remained down for more than one or two days. The hernia had come down the Friday preceding my visit, which was on Wednesday, after a day's labor, and she could not reduce it. It gave her no trouble more than formerly, until Monday, when she was in some pain. Wednesday morning she sent for her physician, who had attempted reduction under chloroform twice during the day, but had failed. As the patient had commenced vomiting, he decided towards evening to send for assistance. When I saw her first the pulse was over 100, if I remember rightly, and her temperature 100°. She had not then vomited for an hour. There had been no stercoraceous vomiting, only water and whatever was taken upon the stomach. There had been no passage of flatus or feces since Monday. I ordered large doses of opium and warm applications to be kept up during the night. Visited her again early in the morning, and as the condition was not improved, decided to operate. Pulse had increased and the temperature was 101.5°. It was decided to cut down, and if possible, reduce the protruding mass by dividing the ring without opening the sac. The parts over the tumor were much congested and thickened by manipulations which had been made in the attempted reduction. The tumor was perfectly dull on percussion, there being no resonance whatever. The diagnosis was omental hernia with a knuckle of intestine included. I cut down upon the sac, which was readily reached. Carrying the finger over the surface, came to the ring and found sac adherent to the entire circumference, so that it was impossible to get between the ring and the sac and reduce the hernia by division of the ring. Upon opening the sac we found the omentum strongly adherent, showing that this condition must have existed for some time. Upon opening the sac there was, at first, no intestine visible. Among the folds, and in a cup-shaped cavity of the omentum we found several knuckles of strangulated intestine. These were reduced with some little difficulty. Then the question came as to the closing of the abdominal cavity. I had in my haste to meet the train telephoned to my office to have my instruments sent to the depot, and found too late that I had no needle sufficiently long to close walls of such thickness. (The thickness of the abdominal walls was three inches or more, and the patient stated herself that she weighed 300 pounds.) I had one of the physicians go to a hardware store and procure some ordinary sack needles, which, after puncturing the skin, I carried through the underlying tissues, including the omentum,

until the skin on the opposite side was reached, when I cut the point out, and threw ligatures across as in a pin-suture. It is unnecessary to say what the result was. A strange coincidence in this case was that it should have followed a similar case that Dr. Gregory had two weeks before. This was the only case in which he had to open the abdomen in the whole course of his experience.

Dr. Mudd.—It may be interesting to the society to have the relation of two other cases of umbilical hernia which have come under my observation lately. Both of them occurred in colored women, both in fat women. In one of them the hernia was very small, and it had been under the care of some physician for several days prior to the time that the doctor was called who had charge of the case at the time when I saw it. The doctor made an effort at reduction, and, he says, he succeeded in reducing the hernia somewhat and, at the time I saw it, the tumor was again present. I made an effort again under chloroform to reduce it, beginning with the understanding that if we failed to make a satisfactory reduction we should go on with the operation. After some steady pressure upon the parts with a gurgle the mass disappeared. I could feel very distinctly the outlines of the ring of the umbilical hernia which is very distinct. I could put my finger in the ring and the outline was imperfect, nor could I feel the ring after inserting my finger. The only theory of resistance was that the hernia was a free sac, that it was not adherent to the opening at all, and hopeful of a good result we decided to wait. The next day the patient was in a worse condition and that evening died. We failed to get a post-mortem.

I saw about two years ago, I think, with the same gentleman, another colored woman who had umbilical hernia, and in that case the woman had passed a number of days without an operation. She was an exceedingly large woman; there was cold, clammy skin. We attempted a reduction and here again failed. We then cut down upon the tumor and found an adherent sac of omentum and the gut which we were able to reduce, but it was dark and, I suspected, sphacelated; and we were discussing how to continue when the woman commenced vomiting and she vomited fully a water-bucket full. She had been drinking water freely during the day and she vomited during the last few hours of life almost incessantly; it came with a perfect rush. There was simply a regurgitant effort without any marked voluntary effort, so that during the first few efforts she made at vomiting the fluid passed from the pharynx into the larynx

and trachea and filled the lungs before we turned her onto the stomach in order to allow her to vomit the remaining portion, and she vomited it seemed to me an almost incredible quantity, and when she finished vomiting she died.

MICHIGAN STATE MEDICAL SOCIETY.

The nineteenth annual session of the Michigan State Medical Society was held at Powers' Opera House, Grand Rapids, June 11th, and 12th. The session opened with about 200 physicians present from all parts of the State. The society was called to order at 10 A. M. by the president, Dr. A. F. Whelan, of Hillsdale. Rev. B. F. Sergent invoked divine blessing, and Mayor Belknap delivered an address of welcome. The report of the Surgical Committee was made by Prof. Donald Maclean, who gave a brief account of several interesting and complicated surgical cases. He presented a number of patients upon whom he had performed difficult operations quite successfully, and his report was more like a surgical clinic than a report of a committee.

The secretary reported that there were 246 names upon the roll of membership. Two honorary members, Dr. Jas. H. Jerome, of Saginaw, and Dr. W. H. Brownell, of Utica, had died during the past year. He had collected in fees during the year \$635 which he had handed over to the treasurer—he had now on hand \$49.91. On motion, discussion on all subjects was limited to three minutes and no person was allowed to speak on the same subject but once.

Dr. S. P. Duffield read a paper on "Expert Testimony." The pith of the paper was on the right of professional men to extra compensation for expert testimony in courts. He cited a case in which he had charged \$250 for making an examination of a body after poisoning by strychnine. The supervisors refused to pay his bill, but did pay it rather than to have the case go to the courts.

Dr. Pratt thought that the medical men should confer with the legal fraternity and secure a different method of employing experts. He thought that we should seek to get scientific testimony entirely, and not secure expert testimony leaning entirely to one side of the case.

Dr. C. J. Lundy, of Detroit, read a very interesting paper on

"The Dry Treatment of Chronic Suppurative Inflammation of the Middle Ear." This paper was discussed at some length by Dr. H. McCall and Dr. Eugene Smith, after which it was referred to the publishing committee.

Dr. Whelan, president of the society, read his annual address, which was a history of medicine and theology from the earliest times to the present day, and the comparative progress of all sciences in the early schools, showing how people were glad to take up medicine after prayers and offerings had failed to cure them. He asserted that the science of medicine has been instrumental in lifting the cloud of ignorance which surrounded the dark ages, and that this has been done by building up the minds of the people; and, despite the opposition that has always been made against the medical profession, it has triumphed over all obstacles.

The committee on admissions reported the names of about sixty-two gentlemen who had applied to become members of the society. This report was adopted and also a resolution requiring each applicant hereafter to pay the admission fee at the same time that the application is handed in. If the candidate is rejected, the fee will be returned.

The number of papers to be read was very much greater than in previous years; many of them were passed without discussion, and others were read by title and referred to the publishing committee. The committee was requested to examine each paper carefully that nothing objectionable might appear in the annual report of the society.

Dr. George, of Ann Arbor, read an interesting paper on the value of turpentine in diphtheria. He had not always been successful with other remedies, but he had, with one exception, been successful with turpentine.

Dr. H. O. Walker, of Detroit, read a paper of considerable interest on the subject of "Exploration of the Male Urethra" and showed his new instrument, a modification of Bigelow's evacuator, which he thought the best instrument in existence for washing out the bladder and for removing pieces of stone and gravel.

Prof. Palmer read a paper and gave an interesting report of his method of treating retention of urine which so often occurs in old men. He has the patient pass urine and after the stream has started, he grasps the end of the penis. In this way the urine in the urethra dilates the passage. He causes the patient to force the

urine forward, thereby dilating the entire urethra. He has had excellent success with this method.

Prof. Mc Graw, of Detroit, read a paper on the "Diagnosis of Tumors." He thought that all tumors should be removed early, and that all diseased tissue should be taken out. He opposed the use of caustics of any kind and thought that many innocent tumors were made malignant by irritating them. He said that cysts of the breast often took on a malignant action, and thought the entire breast should be removed when the cyst is first discovered.

Mr. Powers tendered the use of his beautiful opera house for the two day's session. The Peninsular Club tendered the society the freedom of their club house for the session.

The session of Thursday morning opened with a large amount of business on hand, and papers were read rapidly and sent to the publishing committee without discussion, and others were referred without reading.

Dr. E. P. Christian read a paper on "Placenta Previa."

Dr. H. C. Wyman read a paper on "Hypertrophy of the Prostate Gland."

Dr. Shepard reported cases of gynecological practice.

Dr. Carstens presented a paper on "Sterility in Women."

Dr. Kirkland a paper on "Aural Catarrh."

The nominating committee then reported as follows: 1st Vice-President, Dr. J. Perkins, of Owasso; 2d Vice-President, Dr. Cook, of Muskegon; 3d Vice-President, Dr. Chittock, of Jackson; 4th Vice-President, Dr. Brummer, of Detroit; Secretary, Dr. Ranney, of Lansing; Treasurer, Dr. Smart, of Hudson; Judicial Committee, Dr. Owen, of Ypsilanti; Dr. Tyler, of Bay City; Dr. McCall, of Lapeer.

Dr. Donald Maclean, of Detroit, was elected President for the coming year.

Dr. Mills invited the society to hold its next annual meeting at Port Huron. His invitation was accepted and the time set for the next meeting was the second Wednesday of June, 1885.

The W. C. T. U. sent a communication to the President asking that papers be prepared on the effects of alcoholic stimulants and tobacco.

Dr. Nichols read a paper on "Nasal Catarrh." He recommended several remedies, but said that little good resulted to patients from change of climate, except in a few who remained in Colorado and Dakota.

Dr. Hemmray stated that in the early stages of nasal catarrh a great many patients were troubled with sweating feet, and that the catarrh is generally relieved by soaking the feet in warm water. For chronic catarrh he thought highly of iodine vapor.

Dr. Jas. T. Auger was admitted to membership.

The Judiciary Committee reported in favor of admitting *Dr. Hendricks*, of Ann Arbor, to membership on his making an apology in public for statements made by him. *Dr. Hendricks* was permitted to address the convention, and stated that he had no apology to make, as what he had stated was true. The president choked him off, and business was resumed.

Dr. Pratt moved that a committee of five be appointed to look after the legislative affairs of the society and the president appointed as such committee *Dr. Pratt*, *Dr. Tyler*, *Dr. Karson*, *Dr. Smart* and *Dr. Piermont*.

The committee on reorganization was then appointed, consisting of *Dr. Johnson*, *Dr. Alvord*, *Dr. McCall*, *Dr. Carman* and *Dr. Breakey*.

Dr. Eugene Smith read a paper on "Granulated Lids."

Dr. Wade, of Holly, *Dr. Ward*, of Langsburg, *Dr. Smart*, of Hudson, *Dr. Sullivan*, of Ann Arbor, *Dr. McCall*, of Lapeer and *Dr. Smith*, read papers by title and they were referred to the publication committee.

A vote of thanks was tendered to those gentlemen who had taken so great an interest in this meeting; and the society adjourned to meet at Port Huron in June next.

THE MODERN PHYSIOLOGICAL SCHOOL OF THERAPEUTICS starts with the understanding that there is at present no known law of therapeutics, unless it is that of antagonisms, by which it is meant that it is possible when a mass of living protoplasm is depressed by some agent, to overcome the depression by a second agent which is stimulant to the protoplasm, or, in other words, that whilst some agencies increase the molecular movements of the protoplasm, others lessen them, and that it is at least theoretically possible to balance more or less perfectly one of these forces against the other.—*Prof. H. C. Wood* in *Phil. Med. Times*, May 31, 1884.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

HOSPITALS ASSOCIATION.—TRAINING NURSES IN HOSPITALS.—
HOSPITAL NURSING IN LONDON.—LACK OF PRACTICAL TRAINING
FOR MEDICAL STUDENTS.—ENLARGEMENT OF HOSPITALS.
—CHOLERA ON VESSEL FROM INDIA.

LONDON, May, 1884.

Since my letter which appeared in the March number of the *Courier*, and in which I mentioned the formation of "The Hospitals Association" that body has held two monthly meetings, and questions relating to hospital management have been discussed. At the first meeting a paper was read upon the out-patient departments of hospitals and the way to remedy the abuses which are admitted on all sides to exist. The chief faults are the overcrowding of the out-patient rooms and the consequent impossibility of all the cases receiving a proper amount of attention, and the application of people for gratuitous medical advice who are quite competent to pay for it. The proposed remedies for these evils, which seemed to meet with the greatest favor, were the preliminary inspection of all applicants and inquiry into their financial position and rejection of those able to pay, the imposition of a small payment for the relief afforded, and the reference of the greater number of patients to provident dispensaries. Some system of graduated small payments was advocated by Lord Cork, partly in consequence of his American experience obtained at the General Hospital of Massachusetts. The objection to this plan is that the hospital authorities receive all the money and nothing goes to the medical profession, and great injury is thereby likely to be caused to the general practitioners. The most radical reform was advocated by Mr. Timothy Holmes, surgeon to St. George's Hospital, who would restrict the relief given in the casualty department of hospitals to cases sent with a certificate from a medical man for consultation and who

after such consultation, should be admitted or sent to a provident dispensary or infirmary. This plain, which sounds most sweeping in the present day, is only a return to the condition of things which existed in all the hospitals some forty years ago. The gigantic out-patient departments of to-day are entirely the growth of recent years.

At the meeting of the Hospitals Association held on the 23d ultimo, the question under discussion was: "How far should our hospitals be training schools for nurses?" Papers on the subject were read by Dr. Bristowe, of St. Thomas's Hospital, and Miss Lücker, matron of the London Hospital. The supporters of trained nurses were so numerously represented at the meeting that the disadvantages of training nurses in the hospitals were not sufficiently brought forward. Several speakers, while advocating the concurrent carrying on of the two schools of medical students and of nurses, pointed out many sources of difficulties that were to be avoided, and difficulties which in practice have never yet been avoided. The use of workhouse infirmaries and other hospitals, not required for the training of medical men, as schools for nurses is free from most of these objections; and sufficient nurses could be trained in these institutions to supply the wants of hospitals attached to medical schools. It was stated that the workhouse infirmaries could not be utilized because of the expense, and on the other hand it was asserted that the general hospitals had been able to save money by letting out their trained nurses for private cases. This method of reducing the expenses of a training school is objectionable, as it causes such a frequent change of nurses in the wards, the best always being sent out. Patients, especially children, often suffer from this frequent changing of their nurses in those hospitals where the system is adopted. Mr. Timothy Holmes took the most sensible view, and commenced his remarks by urging that the chief use of hospitals was that they should teach practitioners of medicine and surgery. He placed the objects of the general hospitals in the following order: Firstly, places for medical education; secondly, for the relief of suffering; and thirdly (no doubt in deference to his audience), for the training of nurses.

The nursing of the London hospitals has not improved during the last ten or twelve years. The expenses have nearly been doubled by the introduction of the innumerable fads of the trained sisters and nurses. The comfort and happiness and, it might al-

most be said, chance of recovery of the patients has been lessened by the introduction of irksome and unnecessary rules in securing the discipline of the wards. And the smooth and harmonious working of the medical officers and the nursing staff (in many of the hospitals) has been destroyed.

The truth is that the training of nurses in the general hospitals interferes very much with the education of the students, and this is becoming more apparent every day. Students now seldom sit up with cases of tracheotomy after the operation, and thereby learn by practical experience (always the best of all teachers) how to direct the after treatment of such a case, should they have one in the country and a trained nurse not be obtainable. In many of the hospitals the nurse now takes the daily temperature of the patients and does most of the bandaging, and a student seldom learns how to make a poultice, or give an enema, or apply a leech, or pass a female catheter, and although he may hold the highest qualifications and have a most thorough scientific training, should he bungle in any of these minor operations when he proceeds to practise in the country he will be considered both by his partner or principal, and by his patient, to be a very bad doctor. The principle of evolution is rapidly transforming the practice of the medical art, at least so far as the performers are concerned. The scientific branches of medical education have been so pushed to the front that a class of practitioners has arisen, who look with contempt upon the details of general practice and who think that all that is necessary is a faculty for forming a scientific diagnosis and a knowledge of the histological characters of any change that may have taken place. But such knowledge does not relieve pain and inconvenience or cure sickness, and so a blank is left in the ranks of the necessary attendants upon sick people which is being gradually filled up by the trained nurse, and soon the trained nurse will be the most welcome as well as the most useful practitioner.

The financial depression which has been felt alike by all the medical charities has not prevented several of the hospitals in London adding to their buildings. Large additions have been made to St. Mary's Hospital, consisting chiefly of a new wing to accommodate sixty additional patients and also new out-patient rooms, and class rooms for the medical school. The opening of the new wing at St. Mary's was to have been performed by her Royal Highness, the Princess Louise, Marchioness of Lorne, on the sixth of this

month, but the ceremony has been postponed until the beginning of July, in consequence of the death of the Duke of Albany. Westminster Hospital has acquired some new ground in its neighborhood on which it is intended to erect an entirely new medical school. The part of the hospital at present occupied by the school is to be used for giving additional out-patients accommodations. The great Ormond Street Hospital for sick children has for some months been crying out for additional funds to complete a somewhat unnecessary enlargement which has been under contemplation for some years. The funds at present at its disposal are not sufficient for carrying out the administration of the hospital in a thorough and efficient manner. A lame excuse is advanced for justifying enlargements at this hospital which has been used on many former occasions by institutions similarly situated. It is argued that when the additions are completed by an increase of 80 extra beds, the cost of maintenance per bed will be lower than at present. The original design of the hospital was for 200 beds; part only has been carried out, which includes five wards each, holding about twenty beds, and several smaller isolation wards, which brings the number of beds in the present building up to 120, but it is said that the administrative departments of the hospital were built for the service of 200 beds, that is, the kitchen accommodation, heating apparatus, dispensary, etc., and that to complete the hospital up to the number originally intended would entail very little extra expense in these departments. But the whole expenditure of the hospital would be very much increased, the amount of food required would be nearly doubled and the number of nurses and servants would also have to be very largely supplemented. As from some cause or other the hospital at present is not in a very flourishing condition, it is difficult to believe that its position would be improved by nearly doubling it. The Middlesex Hospital has been engaged in carrying out extensive alterations for some time past, but has just recently completed the purchase of four of five adjoining houses for many years rented by the hospital. It is intended to pull down these houses, which are very old, and to build in their place rooms for the resident medical staff and for servants, including an additional room where any member of the staff can be nursed and attended if attacked by severe or infectious illness. There is also to be an additional ward for male cancer patients. The Middlesex is the only hospital which has special provision for

cancer in the shape of cancer wards. Patients are admitted into these wards in order of application and allowed to remain until death, or until an operation has been performed which will enable them to return to the world and their friends for a short time longer. The devotion of a large number of beds to what may be called chronic cases, of course decreases the value of the hospital to a certain extent, as a school for clinical teaching, but it is a great boon to those suffering from a most distressing and painful disease; and every means for relieving that suffering by treatment is taught in the hospital, and will, in after years, be found extremely useful to many of the students. Five thousand pounds have already been received to be especially devoted to the male cancer ward. The entire alterations and improvements are estimated to cost £20,000. It is very satisfactory to be able to record that proper provision is to be made for the resident medical staff. Their comfort and convenience is too frequently overlooked at most of the London hospitals. It is very essential that they should be well provided for, their work being of a most laborious and responsible description, and performed under conditions not eminently suited to maintain health. They are living in a hospital atmosphere with their rest frequently broken, are for many hours at a stretch on duty and unable to take healthy exercise outside the walls of the institution; and their minds are always more or less under undue tension, as they have to be always ready both to direct and to act on any emergency. It is a very frequent occurrence for young house surgeons and house physicians to break down during their term of office; and complaint has more than once been made that they do not receive, under these circumstances, due consideration at the hands of the lay hospital authorities. A feature in the new prospective building at the Middlesex Hospitals is that a sick-room is to be provided for the use of the resident medical staff.

A few days ago a troop ship arrived at Portsmouth from India with cholera on board. Six soldiers had died of the disease on the passage between India and Malta, and several others had been ill. The fatal issue in some of the cases was most rapid, death occurring about an hour after the first symptom of illness. Several of those who volunteered attendance on the first few cases were themselves seized with the disease, and the greatest consternation prevailed on board. On arrival of the ship at Malta, fresh orderlies, belonging to the army hospital corps were ordered on duty in the

ship, to attend to the sick, and none of these took the complaint, nor did any other fresh case occur after the ship left Malta. This incident illustrates in a most striking manner the proneness of those to take an epidemic disease who have been under the same conditions and exposed to the same surrounding influences as those attacked, and also the immunity enjoyed by entire strangers. No quarantine was enforced on the arrival of the ship at Portsmouth. After the medical officer of health belonging to the port had made his inspection, he found that such care had been taken for the isolation of those who had been ill during the voyage that it was perfectly safe for the rest of the passengers and crew to land.

The profession has lately lost one of its most accomplished members, both in manners and learning, in the person of Dr. Andrew Whyte Barclay, consulting physician to St. George's Hospital. Dr. Barclay was an M. D. of the University of Cambridge, and an examiner on Public Health at the University. He only retired from the active practice of his profession in London about eighteen months ago.

E. V. A.

VIVISECTION ENDORSED.—At the conclusion of the report of the committee of the Penn. State Medical Society, to which was referred the appeal of the American Anti-vivisection Society, Dr. S. Weir Mitchell, the chairman, offered the following resolution, which was adopted without a dissenting voice:

Resolved, That in view of the attempts which have been or may be made to obstruct by restrictive legislation, the progress of experimental medicine, this society desires to express its earnest conviction that experimenting on animals is a most useful source of knowledge in medical science; that it is the means by which many important discoveries, both practical and scientific, have been accomplished; that its direction and supervision can be properly intrusted only to members of the medical profession, and that its restriction or prohibition by law would inevitably retard the acquisition of knowledge in respect to healthy and morbid actions, the causes and prevention of disease, and the improvement of the medical art.—*N. Y. Med. Record*, May 17, 1884.

COMMUNICATIONS.

ANTISEPTIC INJECTIONS AFTER PARTURITION.

Editor Courier of Medicine :—Medical writers, some at the top of the ladder of medical fame, others in the obscurity of frontier and backwoods practice have written a great deal recently in regard to puerperal fever and its prophylaxis by antiseptic injections after parturition. These numerous articles in our current medical literature prompt me to give my experience as a country practitioner. In order to illustrate, I will cite a few cases as they came under my treatment. I have been practising in this locality over six years. During this period I have attended over five hundred woman in confinement, (the number is not exaggerated, this is a very prolific locality in regard to reproduction and the survival of the fittest). All varieties of cases have come under my care, those in which labor was completed in an hour, and those in which it lasted several days, versions, instrumental deliveries, lacerated perineæ, etc.

In this variety of practice and amid surroundings which would seem to be very hot-beds for the propagation of bacteria and bacilli, I have had only one case of puerperal septicemia, and this case occurred while I was studying practical anatomy in the Medical Department of the Kansas City University.

The husband (a laborer) of a woman, the mother of seven children, called me from the dissecting room to attend his wife in confinement. I washed myself, using lye enough to almost scald my hands and visited the woman. Finding the symptoms not very urgent, I went home without making a vaginal examination, washed myself thoroughly again, and changed every particle of my clothing and returned to my patient. As a further precaution I anointed my fingers with carbolized vaseline while making my examinations. The woman had a perfectly natural and easy delivery of a healthy child and secundines ; and everything was doing

finely until the fourth day, when I was called in haste. I found my patient had had chills the night before, and on examination I found peritonitis, metritis and cystitis, and the woman in a deplorable condition. Under the use of quinine and opium and intra-uterine injections of a two per cent. solution of carbolic acid, she recovered. Now, the question occurred to me whether the septic material in this case was carried by me, notwithstanding all my precautions, from the dissecting room to the puerperal woman, or whether her disease originated in the unfavorable and, in fact, exceedingly filthy surroundings.

Three years ago, after I had been daily exposed to the small pox and while having the prodromata of variola or varioloid, (I had the most intense fever and backache, and the varioloid eruption appeared the following morning), I was compelled to attend a woman in confinement, and I had to remove the placenta on account of threatened hemorrhage. I gave her no medicine, used no injections and she had neither variola, varioloid nor puerperal septicemia.

Another case came under my care four years ago, in which an officious midwife had, in a case of abortion at the fourth month, torn the trunk of the fetus from its head, and the placenta and the head remained in a spasmodically contracted uterus for several days until I was called. Under complete anesthesia I succeeded in extracting the head and part of the placenta with polypus forceps (the only suitable instrument at my command).

I directed warm water injections in the vagina and left for home with the instruction to inform me next day of her condition; her husband, a lazy and very indifferent fellow, did not make his appearance in my office until the fourth day, when he told me "the bed smelt bad." I visited her again and found a portion of the decomposed placenta and blood clots presenting. I succeeded in removing the contents of the uterus with my finger, and, having no carbolic acid at hand, washed the uterus by injecting warm water. Except a few doses of quinine and opium the patient received no treatment and made a rapid recovery without symptoms of septicemia.

I could cite a number of other cases in which, from the very circumstances under which delivery took place and the exceedingly unfavorable hygienic surroundings, puerperal septicemia would seem to be the unavoidable result, but injections were not used because no septic condition followed.

I believe the practice of the average physician in these cases is the same as mine, *i. e.*, to use injections of carbolized water or the now fashionable antiseptic solution of bi-chloride of mercury only in such cases as absolutely require it. Parturition is a physiological process and to irrigate every womb with antiseptic solution immediately after delivery seems to me meddlesome practice.

L. A. WOHLFARTH, M. D.

Rosedale, Kans.

PSEUDOLEGMANIA OR MENDACIMANIA.

Editor Courier:—I have read with great profit able treatises on kleptomania, nymphomania and alcoholism. I have been surprised that the attention of the profession has not been directed more particularly to the malady that heads this article.

Recognizing its malignant character and rapid spread throughout the land, I feel constrained to write of it.

So utterly unknown is it to classical medicine that I am at the pains, *in liminis*, to choose a name for it. The two above are suggested. The first from *pseudos*—false, *logos*—speaking, and *mania*—which has been transferred to our tongue. The latter from *mendax* and *mania* which have well known English equivalents.

The disease is confined to no one section, or station of society, but I believe is more prevalent where many people are crowded, and where higher civilization is found. Infancy and extreme old age are usually exempt. It is both hereditary and contagious.

The different types may be classed as *malignant* and *benign*.

The former and severer form is due to a confirmed cardiac taint, are destructive in their effect and difficult of cure.

The latter is due often to inadvertency, or temporary alienation, and if seen before the system is too greatly contaminated promise fair hope of cure. Either form, if the patient is not given the benefit of careful treatment, will result in hopeless psychological depravity.

The cerebral lesion, Prof. Fowler tells us, is an absorption or deficient development of the superior posterior convolution. The rational sign is a vertical depression.

The disease is essentially a morbid and irresistible temptation to

speaking falsely. My plea in behalf of its unfortunate victims is that it be not considered a moral crime, but, like nymphomania and kleptomania be classed among the neuroses, and an effort be made to diagnose and treat it upon scientific grounds, and thus lift a burden of reproach from a large class of unfortunate persons and give them hope of relief.

In the matter of treatment I have not much to suggest.

Some cases yield readily to simple medication, while others are hopelessly incurable. The great difficulty is to secure the co-operation of the patient.

I have found the following frequently effectual and shall continue to use it in suitable cases:

R ^x Capsici pulv.,	-	-	-	-	-	gr. xxx.
Ft. pulv.	-	-	-	-	-	No. xv.

S.

One on tongue just as the patient feels the attack approaching.

A. B. REDLOH, M. D., Mississippi.

COMPLICATIONS ARISING AFTER AN AMPUTATION OF A LEG.

Editor Courier.—James Ferguson, white, æt, 38, employed by the St. Charles Bridge Company, while unloading some iron rails received a compound, comminuted fracture of the right leg. I amputated the limb below the knee, about three hours after the accident, being assisted by Drs. Johnson and Bruire. While dissecting up the upper flap, I noticed that this was much bruised, though there was no indication of this on the skin. In order to avoid amputation at the knee joint, or above the same, we decided to utilize the injured and bruised flap. The next morning after the operation he had a temperature of 102°, and there was much heat in the stump; in the evening of the same day he complained of pain in the stump, which necessitated a change of dressing. The next morning the upper flap commenced to discolor, and within a day or two gangrene had set in. Lymphangitis was set up, which extended on the inner side of the thigh up to the abdomen; general condition of patient was bad, pulse being from 110 to 120 and temperature varying from 102° to 104°. About the fifth or sixth day a

line of demarcation made its appearance which separated the entire upper flap down to the bone. Now the febrile symptoms and the lymphangitis gradually subsided. The dead flap was removed, after which healthy granulations sprung up, and the case progressed favorably till the evening of the 12th day, when he complained of chilly sensations, which were followed by a high fever, a frequent pulse and a temperature of 104° . As the stump still was looking well, I was unable to explain this sudden change. Patient became restless and delirious during the night, and suffered from nausea, vomiting and epigastric tenderness. Fauces were inflamed, and swallowing painful. The next morning the temperature was still very high, $103\frac{1}{2}^{\circ}$, and general symptoms about the same as the night before; in the evening a maculated eruption made its appearance upon the forehead. In the evening of the next day vesicles, the characteristic vesicles of small-pox, were plainly visible; by this time diffusion of the eruption over the entire body had taken place. In this connection I wish to state that headache and backache, which are so prominent as a rule as to have considerable diagnostic significance, were entirely absent in this case. As the patient had not been exposed to the contagion of small-pox as far as he knew, and as there had been no cases of small-pox in our town for years, I was completely at a loss to explain how this man contracted it, till I learned that one of the gentlemen who assisted me, had been called in consultation to see a case of variola about ten miles from here two days before the operation.

It is unnecessary to refer to the general symptoms as far as they relate to small-pox, as this disease ran its regular course, with this exception, that the degree of remission of the temperature at the commencement of the stage of eruption was not so marked as it usually is. As soon as varioloid had fairly set in, the stump assumed the whitish appearance of salted meat, and discharged an unhealthy serous pus, which emitted a fetid odor. Antiseptic dressings were renewed twice a day, the carbolized oil and iodoform ointment being used. Supporting measures, tonics, alcoholics and alimentation were resorted to during this time. While desquamation was taking place, and after the fever had entirely subsided, the stump commenced to regain a healthier condition, and granulations again made their appearance, and with them healthy pus. The Basilicon ointment was now used for a dressing, which seemed to stimulate the granulations more than any other dressing. Recov-

ery after this took place so rapidly that ten weeks after the operation the stump was entirely healed, patient having a splendid stump, which, although sensitive at first, now carries an artificial limb with ease and comfort.

I have reported this case, as it shows how susceptible a person having a wound is rendered to the contagion of small-pox. Although, in all probability, this man was inoculated with the contagion of variola, the period of incubation was not shortened any, as is usually the case.

H. H. VINKE, M. D.

St. Charles, Mo.

PROTECTING THE PERINEUM.

FLORENCE, ALA., May 18, 1884.

Editor Courier.—Having noticed the many unpleasant results following from rupture, more or less complete, of the perineum, I have thought it well to call attention to a simple manipulation which I have practised successfully for some time for the purpose of preventing such laceration.

At the end of the first stage of labor, when we observe the head of the child being pressed with great force against the perineum and the labor being retarded, the perineum being unusually upon the stretch, and every indication that it will be lacerated, by carefully inserting the index finger well oiled into the rectum and drawing it forward, we can relieve the part of its extreme pressure and burden. After we have thus lifted the head from its impacted position, the finger can be retained *in situ* until the shoulder of the child is presented, and with the same assistance of the finger its pressure against the already tense perineum can be alleviated. In ordinary cases of head presentation this method of manipulation, I think, far excels any other in protecting the perineum.

Inasmuch as I had practised this manipulation for some years before my attention was called to Dr. Goodell's teaching on the subject, I have thought it possible that there were others among your readers to whom the suggestion might be valuable, and who, like myself, had failed to observe the method of Dr. Goodell, which seems to be in all essential particulars the same as that which I had practised independently.

C. M. WATSON.

NOTES AND ITEMS.

OVARIOTOMY IN PRIVATE HOUSES.—Lawson Tait says: Any woman who has an ovarian tumor removed in her own house is a fool for her pains.

CORRECTION.—On page 527 of June COURIER, the sixth line from the bottom of the page should read: "The operation consumed one-half hour from the time she commenced to inhale the anesthetic."

CURIOUS ERROR.—In a card received the other day concerning a widely advertised infants' food, we see the statement that cane sugar contains about 98 per cent. of pure carbon when in fact only 42 per cent. of sugar is carbon.

THE ILLINOIS STATE BOARD OF HEALTH is now engaged in revising the Register of Physicians, preparatory to publication. Any changes or corrections should be promptly sent to the Secretary. Lists of the Officers of the Medical Societies in the State are also requested,

STATE HOSPITAL FOR EPILEPTICS.—Dr. Carlos F. MacDonald, of the Auburn, N. Y., Insane Asylum, urges the State to give him a new building with a farm outside of the city limits. His present building could then be used as a state hospital for epileptics.—*N. Y. Med. Rec.* May 17.

SEEING BY TELEGRAPH.—We read in the *Times* of a novel and startling addition to telegraphic possibilities, viz., "seeing by telegraph." By means of a lens, an image of the object is thrown upon a receiving plate. This is built up of a series of thermopile elements grooved anteriorly to an even surface, and connected by their posterior ends with a series of wires which transmit the electric currents generated by the reception of the image to a similar series of

elements in a second plate at a distance. In this second plate, the electric currents create changes exactly corresponding to those produced by the image on the receiving plate. The close analogy between this apparatus and the rods and cones of the retina and the fibres of the optic nerve is obvious.—*British Medical Journal*.

SUITS FOR MALPRACTICE.—Judicial decisions have been rendered in several different states to the effect that in cases where a physician or surgeon has recovered the amount of his bill by legal process no suit for malpractice can be sustained, inasmuch as the result of the first proceeding forms a legal recognition of the value of his services.

FEMALE PHYSICIANS.—At the recent meeting of the Pennsylvania State Medical Society, Dr. Wm. B. Atkinson presented the names of several lady physicians who had been denied admission to the Philadelphia County Society on account of their sex, but who were entitled, he thought, to membership in the State Society. The ladies were admitted as visitors without the privilege of voting.

SYMMETRY OF NORMAL LIMBS.—Dr. Jno. B. Roberts observes that a delusion existing in many minds is that the lower extremities are usually of the same length. Clinical and anatomical investigation show that asymmetry in the length of normal limbs is of common occurrence, therefore measurements of the legs in cases of fracture are of little value, since it is impossible to know whether it is the femur of a long or a short leg that is the seat of injury.—*Address before Pa. State Med. Soc.*

INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY.—The fifth session of this congress is to be held at The Hague, August 21 to 27. The provisional programme has already been issued; and reports and papers have been promised by some of the most distinguished hygienists of the world. The committee announce that they have received encouragement and promise of co-operation from representative men in every civilized country. The programmes and other publications will be made in French and German.

DISPUTE CONCERNING A HEAD.—Some ten years ago an Englishman who was then in straitened circumstances, made a contract with an eminent medical practitioner to the effect that, in consider-

ation of a certain sum of money paid by the practitioner the head of the aforesaid impecunious Englishman should, on his death, become the property of the practitioner, who was specially desirous to have the opportunity of examining it on account of notable peculiarities in its conformation. During the ten years which have elapsed since the conclusion of the contract the circumstances of the individual markedly changed, and he has died leaving quite a handsome property. His relations refuse to carry out the provisions of the contract; on the other hand, the practitioner refuses to accept compensation and has appealed to the courts to enforce specific performance of the contract. In the meantime the man has been buried with his head *in situ*.—*Brit. Med. Jour.*, May 10, 1884.

BATHING IN MISSOURI.—Dr. W. E. SCOTT delivered an address on hygiene before the professors and students of Drury College. In speaking of the importance of bathing he stated the results of his personal observation having taken pains to question patients and others as to their habits in this respect.

He says: "Some of the answers in regard to bathing have caused me to change my ideas regarding the cleanliness of the human race. One old man in particular, who lives in one of our southern counties, who consulted me in regard to an afflicted pair of eyes, on being interrogated about his personal habits, gave some amusing answers.

When asked how long it had been since he had taken a bath, he replied by asking me if I meant 'wet all over.'

Assuring him that I did, he scratched his grizzly locks a moment and remarked that it had 'been a long, long time.'

About how long I asked, thinking that he had perhaps missed his customary ablutions for a few months. After digging again into his tangled hair, he said he could not remember having been wet all over since 'sixty-three.'

I have questioned very closely a large number of people in professional consultations, and find many who seem to know nothing of the delightful sensations, the refreshing feelings of the bath beyond taking a few plunges in some shallow creek during the hot, sultry days of summer.

I venture the assertion that there is not a third of the people of the state who average one bath per month, and again there are at least fifty per cent. who do not take a full bath from October till the

month of May. This unpleasant and unhealthy condition of things is not more characteristic of the people of this state than it is of others, if the truth was sought by those who are in position to have their questions received and answered as medical advisors."

OTORRHEA FROM A LIFE INSURANCE STANDPOINT.—Dr. Charles S. Turnbull, in a paper read before the Penn. State Medical Society, lays much stress upon the importance of life insurance examiners determining the presence or absence of any chronic discharge from the ear of applicants for insurance, as being a matter seriously affecting the prospect of life.

As an easy but complete method of examining the ears he suggests the following, which makes the examiner independent of the statements of the applicant and at the same time dispenses with any special apparatus for examination: 1. Test each ear separately with the watch, the eyes being covered; 2. Inspect by good daylight the auricular region, especially noting conditions of mastoid or cicatrices thereabouts; 3. Inspect (nasally, as do the gasfitters) each auditory meatus, and, to sum up, what the impaired hearing does not suggest, cicatrices from loss of bone or fistulous orifices over temporal bone will point out, while the presence of pus or, what is more significant, of fotor, will settle the question.

He thinks that a purulent discharge from the ear should always raise a question with insurance companies, and its character and ultimate course as to the future health of an individual can only be settled by an expert whose experience will enable him to determine whether the condition is curable or not.—*N. Y. Med. Rec.* May 21, 1884.

MEDICAL ADVERTISING.—Dr. O. H. ALLIS offered a resolution in the Pennsylvania State Medical Society, which created quite a breeze. When the report of the publication committee was read, he offered a resolution that no abstract of any paper read before the society during the session should be published until approved by the publication committee. He stated that some of the members had made a practice of furnishing to the reporters abstracts of their papers, sometimes to the extent of a column or two, while those who did not furnish such abstracts were cut off with a few lines, that this did not depend upon greater merit in the papers of which the full abstracts were given, but upon the fact that the

authors were smarter than the others and knew how to avail themselves of the advantages of printer's ink. He characterized it as the worst kind of an advertising dodge.

The resolution was referred to a special committee of five members, who reported at the morning session of the last day the following:

"All the papers read or appointed to be read before this society become thereby the exclusive property of this society, and the author has no right to publish or cause to be published the paper, or any part of the same, without the consent of this society. The committee on publication shall not be at liberty to publish any paper that has been published in violation of the above requirement.

"*Resolved*, That the Medical Society of the State of Pennsylvania, look with great disfavor upon the making use of this organization as an advertising medium, and hold such practice as contemptible, as a flagrant violation of the code of medical ethics."

After some pretty warm discussion the report was laid upon the table.

AMERICAN PUBLIC HEALTH ASSOCIATION.—Active preparations are being made by the local committee and by the executive committee for a large and profitable meeting of this association in St. Louis, October 14, 15, 16 and 17.

The executive committee has adopted the following list of topics for consideration:

1. Hygiene of the Habitations of the Poor.
2. Hygiene of Occupations.
3. School Hygiene.
4. Adulteration of Food.
5. Water Pollution.
6. Disposal of Sewage by Irrigation or Chemical Action.
7. The Observable Effect upon the Public Health of Official Sanitary Supervision.
8. The Work of Municipal and State Boards of Health.

Persons intending to present papers on any of these or other kindred subjects are requested to send at once to the secretary, Dr. Irving A. Watson, Concord, N. H., their names and address, with subject of the proposed paper.

The papers must be submitted to a committee before being read to the association, and for this purpose should be placed in the

hands of the secretary at least three days before the commencement of the meeting. Not later than September 1st, a condensed abstract should be sent to the secretary to facilitate the preparation of the programme. The papers may be sent by mail or express to the secretary, at the address mentioned above, until October 1st; after that date in care of Dr. Jos. Spiegelhalter, St. Louis.

It is heartily desired by the officers and committees that the medical profession of the West will take a hearty interest in this important meeting, and that it may be made the best meeting yet held by the association.

Papers will be welcome, and will be assigned to places upon the programme from those who purpose joining the association at this meeting, as well as from those who are already members.

Announcements will be made later in regard to transportation, programme, etc.

INTERNATIONAL MEDICAL CONGRESS.—The programme of the Copenhagen Congress, which we have received, gives assurance that the most sanguine anticipations of a pleasant and profitable meeting will be more than realized. The papers already prepared for the different sections are sufficient to occupy well the time, and there are a good many others announced. We are sorry to see that the United States will have so small a part in the proceedings. Of the nearly two hundred "prepared communications," only six are by American practitioners.

The sessions of the Congress are to commence Sunday, August 10, and continue through that week. The membership fee will be 20 crowns (Danish), 22 shillings, 3d, or about \$5.35. Members will be registered in the office of the Congress on the day preceding the opening of the sessions, or during the hour 8 to 9 A. M. any morning of the Congress. Registration may be obtained beforehand by sending to the Secretary-General the amount of the fee with name, position and address. At the time of inscription, each member is requested to indicate which section he purposes principally to attend. Sections will hold morning and afternoon sessions of two hours' duration, and a general meeting of the Congress will follow the afternoon meeting of the sections; while the evening hours will be given to addresses of a more popular character on subjects of universal interest.

The official languages will be English, French and German, and

the rules, programmes and abstracts of announced papers will be made in these three languages. All official communications which cannot be made in all three languages, will be in French.

The introductory addresses are limited to twenty minutes, and remarks in discussion to ten minutes.

ST. LOUIS POST-GRADUATE SCHOOL OF MEDICINE, POLYCLINIC AND HOSPITAL ASSOCIATION.—The following gentlemen of this city have associated themselves in a faculty for the purpose of post-graduate instruction:

P. Gervais Robinson, M. D., General Medicine and Principles of Diagnosis; H. Tuholske, M. D., General Surgery and Genisto-Urinary Surgery; J. K. Bauduy, M.D., Diseases of the Nervous System; W. A. Hardaway, M. D., Diseases of the Skin; H. N. Spencer, M. D., Diseases of the Ear; W. C. Glasgow, M. D., Diseases of the Throat and Chest; A. J. Steele, M. D., Orthopedic Surgery; G. J. Engelmann, M. D., Diseases of Women; Chas. Michel, M. D., Diseases of the Eye.

A charter was secured some time since, a handsome lot on the corner of Lucas and Jefferson avenues has been bought, and by the first of July the foundations of the college structure will be commenced. It is the aim of the faculty to erect a building in every way suitable for the object in view; and the plans include lecture and clinic rooms, ampitheatre and wards and rooms for cases requiring operative measures. It is hoped that matters will be in such shape as to allow of the formal opening of the school in the coming winter.

ALUMNI OF MISSOURI MEDICAL COLLEGE.—At the State Medical Association in Sedalia May 20 to 23 inclusive, numerous graduates of the Missouri Medical College of St. Louis being present, it was decided to hold a meeting and organize as a body.

At 4 o'clock Wednesday afternoon May 22 the alumni met in the parlors of Sicher's Park Hotel. Dr. N. M. Baskett explained the object of the meeting and requested Dr. J. W. Trader to take the chair and preside. Dr. Trader was then elected chairman of the meeting. Dr. N. M. Baskett was elected secretary.

The following members of the Faculty of the Missouri Medical College were present at the meeting: Profs. Prewitt, Tuholske and Todd. These gentlemen addressed the members concerning the early history of the school.

Refreshments were ordered; several members present detailed pleasant memories of student life.

Thirty members with their places of residence and years of graduation were registered.

Dr. T. C. Boulware related in a pleasant manner some characteristic anecdotes of Dr. Joseph N. McDowell, the founder of the college. Dr. J. W. Trader followed with a fresh fund and some remarks concerning the influences generated by Dr. McDowell, and their continued action on the present and future alumni of the college. Dr. T. F. Prewitt in some appropriate words proposed "the memory of Joseph N. McDowell."

It was moved, seconded and carried that each alumnus of the college present at this meeting constitute himself a committee of one to notify graduates who may attend the State Medical Association at St. Joseph in 1885 that there will be a meeting of the alumni on the second afternoon of the session of that association, the place of meeting to be decided upon in St. Joseph. It was moved and carried that the secretary be instructed to send a copy of the proceedings of this meeting to the ST. LOUIS COURIER OF MEDICINE for publication.

On motion meeting adjourned to meet in St. Joseph May 1885.

N. M. BASKETT, M. D., SEC'Y. J. W. TRADER, M. D., PRES.

Such reunions of graduates of different schools form a very pleasant feature of the associations in some of our Eastern States. It would be well if alumni of other colleges would arrange for similar reunions. Anything which adds in interest to the meetings of our state association is profitable to the profession.

THE MCDADE TREATMENT OF SYPHILIS.—At the last meeting of the Tennessee State Medical Society, Dr. Glenn stated that in his own large experience, and in that of Dr. Douglass, of the Nashville Marine Hospital, the McDade treatment had been a complete failure.

BIRDS FLEEING FROM CHOLERA.—In India, Russia and Germany it is noted that even the rooks fly away on the coming of cholera and reappear when it is over. Kites, vultures and other birds of prey abandon the cantonments of the army when cholera appears in India, and seem to scent it afar off, even in the atmosphere they breathe. At least human wisdom ought to be equal to that of the birds of the air and the beasts of the field.—*Rep. and Papers of Am. Pub. Health Ass'n., Vol. VII. p. 33.*

OBITUARY.

DR. A. P. LANKFORD.

Dr. A. P. Lankford was born near Lexington, Mo., in 1842, and graduated in medicine at Jefferson Medical College in 1866.

He was for several years professor of surgery and clinical surgery in the Missouri Medical College, but for the last four years has been residing in Lexington among the friends of his boyhood and early manhood.

We append the resolutions adopted by the Faculty of the Missouri Medical College.

Resolved, That, informed of the sudden demise of Dr. A. P. Lankford, we deem it just to treasure in writing our regret that our profession should have lost one so fitted to gain preeminence in his profession.

That, though for years has been broken the relationship between him and ourselves, as members of this faculty, yet fresh in our memories rest the beautiful traits of his character, and his great worth as a physician and surgeon.

That in him we ever recognize a brilliant genius, and an ardent devotee of science, an extraordinary talent, a rare skill and an energy, a courage and a perseverance which brooked no obstacle in his profession.

That he was in social life a man of unsullied integrity and truthfulness, a warm, generous, sympathetic friend, and with the poor with whom he was in contact, ever the unswerving, faithful, pitying aid, giving largely and gratuitously of his best professional services, and even readily opening his purse-strings for their relief.

Resolved, That the secretary be directed to publish these resolutions officially and to address a copy to the aged mother of the deceased.

At the regular meeting of the Lafayette County Medical Society,

convened at Lexington, Monday, June 9, 1884, the following resolutions were offered and adopted, viz.,

Resolved, That we regard the untimely death of Dr. A. P. Lankford as a grievous and irreparable loss to the physicians and the people of Lafayette county. Sorrow fills our heart [that] a professional brother of such wonderful skill and celebrity should have been cut down in the very noon-day of manhood, and in the height of his professional fame and usefulness.

Resolved, That we not only bear testimony to his skill as an operator, but, what is fully as important to the soundness of his judgment and the fearless discharge of his duties to his patients with regard to their ultimate safety.

Resolved, That we also testify to his uniformly kind and courteous treatment of his professional brethren, as well as to the suffering poor, to whom he was always willing and ready to lend a helping hand, like the Great Physician of eighteen centuries ago.

Resolved, That the Medical Profession of the State of Missouri and the profession at large has lost one of its brightest ornaments, a gentleman of the highest culture, a physician and surgeon who ranked among the best and stood shoulder to shoulder with Gross, Hodgen and Gregory, and the very few who have attained to their eminence.

Resolved, That we deeply sympathize with the afflicted relatives in the death of our professional brother, and that we commend them to the care and consolation of the great Ruler of the Universe as the only source of comfort in such a great sorrow.

Resolved, That a copy of these resolutions be presented to the family of the deceased, and that a copy be published in the leading medical journals of St. Louis, and in the Lafayette county newspapers.

C. W. SEEBER, President.

J. J. FULKERSON, Secretary.

J. H. STRAUGHN,	} Committee.
P. S. FULKERSON	
R. C. CARTER,	
C. W. SEEBER.	

ST. LOUIS COURIER OF MEDICINE.

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ORIGINAL ARTICLES.

DEAFNESS AFTER MUMPS.

BY C. A. TODD, M. D., ST. LOUIS.

[*Read before the Missouri State Medical Association.*]

IT is perhaps not generally known that parotitis epidemica, or mumps, is sometimes followed by deafness more or less complete, as well as by affections of the testes, ovaries, mammæ, prostate gland, kidneys and meninges of the brain. In England this form of deafness must be more common than elsewhere, since Toynbee in his work, "Diseases of the Ear," published in 1860, states "that the peculiar poison which causes the disease generally known by the name of mumps is *very often* the source of deafness, which, however, usually occurs in one ear only. In these cases the nervous apparatus is evidently affected, as the deafness comes on suddenly, is usually complete, and, as a general rule, no appearance of disease can be detected in the meatus, membrana tympani, or tympanic cavity." It appears to be infrequent in Germany since Politzer in his last edition, 1883, barely refers to it. In France, also, the attention of the profession has been but little called to it, if we may judge by the silence of the *Annales des Maladies de l'oreille* upon the sub-

ject, as well as that of Dr. Bonnafont in his elaborate text-book published in Paris, 1872. With us in America such deafness must be rare. Dr. Buck of New York, in a paper read at the session of the American Otological Society, 1881, declares that he finds cases of deafness after mumps recorded but by two American authors.

Such being the rarity of the disease in question, I have thought it a matter of interest to present to the association a case that came into my hands through the kindness of Dr. Mulhall of St. Louis.

April 23, 1884, Peter H., a stout, well-nourished boy of six and a half years, entered the clinic of the Missouri Medical College apparently totally deaf, and with the following history: March 17, five weeks previously, he exhibited a swelling in the region of both parotid glands; mumps was epidemic at his school. The swelling was marked, but the boy suffered so little inconvenience that he continued to play about the house. The swelling lasted two weeks. At the end of the first week one day he complained of being dizzy; on attempting to go down a descent of two steps he fell—said he could not help it, his head was so dizzy. Some irregularity of gait was noticeable for about two weeks, by which time it had gradually disappeared. On the day when the dizziness was complained of, the boy's hearing seemed as usual. It should be noted, however, that the mother is a rather ignorant and probably unobservant person. The next morning at 9 o'clock, when the mother tried to awake him, she found that he could not hear her voice, that he was absolutely deaf. The child himself quickly recognized that a great misfortune had befallen him and cried with fright. Upon sitting up he retched and vomited a little mucus; there was no more vomiting, nor had he previously complained of nausea. He remained completely deaf in both ears ever since, up to time of examination. At the time of his visit to the clinic the boy had no other ailment than the deafness, which seemed complete to all sounds; though on account of some natural alarm on his part during examination, there might have been some slight perception of sound that was overlooked. The tympanic membranes were about normal. Since April 24th to

the present time I have been applying the constant electric current at such times as the child is brought for treatment. There seems to have been some good result, as loud snapping of the fingers can now be heard, and other distinct noises. Of course the use of electricity is wholly expectant. The air douche has been applied, and counter irritation over the mastoid may be advisable.

When we attempt to explain the pathology of this form of deafness, numerous difficulties at once arise. Various theories have been advanced to explain the connection of the nervous lesion with the parotitis, since, as Toynbee maintains, the deafness must be due to an affection of the auditory nerve—but, how or where, that is the question. In the case just described, the labyrinth certainly is the seat of the lesion; as to the how, there are several views advanced.

Toynbee suggests that the peculiar poison of the principal disease also causes the labyrinth disease; that is to say, the deafness arises from the general infection. This is the opinion of some French authorities. Metastasis is a common explanation for the occurrence of the orchitis sometimes observed in the course of mumps; it may as well be inferred that the *materies morbi* sometimes leaves the parotid for the closely adjacent labyrinth or tympanum. Finally, and what to my mind is the most reasonable explanation, the inflammation extends from the salivary gland along the vessels and nerves directly into the ear and there sets up fresh tissue changes. The facial nerve enters the temporal bone with the auditory, the two making the seventh pair; it then passes over part of the labyrinth, and escaping from the skull, is buried in the substance of the parotid gland. Plainly, this nerve offers a ready guide for the parotid inflammation to the most delicate parts of the ear. The stylo-mastoid and tympanic arteries must pass out of the parotid to reach the cavity of the tympanum and, if, as Politzer insists, these vessels anastomose with those of the labyrinth (terminations of the auditory from the basilar), they afford a ready means of communication of disease. Similarly, the occurrence of meningitis may be so traced. Exudation into the labyrinth would explain the sudden production

of deafness according to this last theory of origin of the disease.

Besides the vascular anastomosis through the tympanic wall of the labyrinth described by Politzer, Lucae of Berlin (vid. Virchow's Arch., June 7, 1882), points out that an inflammation of the tympanum in children may extend through the open suture between the squamous and petrous sections of the young temporal bone, and thus involving the dura mater, follow its vessels directly into the labyrinth itself; especially the vessels that enter a large opening, which, in young children, exists under the superior semi-circular canal of the labyrinth. This anatomical condition can also explain the deafness that sometimes ensues upon acute otitis media of children, and upon cerebro-spinal meningitis, which has given rise to so much discussion.

It is worthy of note that at least one case of optic neuritis has been recorded as appearing in the course of an attack of mumps with orchitis; it resulted in complete loss of sight in the affected eye. In respect to the treatment of symptoms that may arise during the course of mumps indicative of aural complication, local bleeding seems to be the most likely to be effective; leeches should be applied freely, back and in front of the ear. The condition of the Eustachian tube and tympanum at the same time should be examined, and proper means adopted to remedy any existing congestion.

THE RELATIONS BETWEEN SPIRIT DRINKING, INSANITY AND CRIME.

BY T. E. POTTER, M. D., CAMERON, MO., *Professor of Physiology in the Northwestern Medical College of St. Joseph, Mo.*

[Read before the Missouri State Medical Association at Sedalia, May 20, 1884.]

GENTLEMEN OF THE MISSOURI STATE MEDICAL ASSOCIATION.—At your last annual meeting, Drs. C. H. Hughes, B. F. Hart, and myself, were appointed a committee to investigate

the "Relations between Spirit Drinking, Insanity and Crime." As chairman of that committee, I wish to present the following paper, it being a compilation of statistics and opinions collected by me from wardens of penitentiaries, and superintendents of lunatic asylums, and quotations from some of the best authors and teachers of the present day, together with a few deductions of my own.

As the questions of temperance and prohibition have assumed proportions so large that, to-day, they threaten to become political factors of no small dimensions, it is rather difficult for one to present a scientific paper upon this subject without having laid at his door the accusation of being influenced in his views by the heated discussions and general excitement that is sweeping over our country.

I have tried to avoid as much as possible anything that did not come strictly from a reliable medical or legal source.

After our investigations we cannot find any more beautiful language in which to express our feelings than that used by Dr. T. D. Crother, of New York. When writing upon "The Diseases of Inebriety," he says: "It is impossible to approach this subject from any side of exact science, without a feeling of awe, and a consciousness that we have come to a great 'Dark Continent,' which borders and crosses the path of human progress."

The influence that "Spirit Drinking" is having in the propagation of crime, in the filling of our insane asylums, in the reduction of our race to pauperism and imbecility, mental and moral, calls upon us to spare no pains or time in exposing to our fellow citizens the enormity of this evil which like the deadly Upas tree diffuses its poisonous germs until the terrible influence is felt in our best families, in our finest forms of society, in our commercial transactions, in our affairs of state, yes, even in our affairs of government.

That my statements might have weight, and this paper be considered of value to this association, I have taken more than ordinary pains to gather what I could on this subject directly from penal institutions and insane asylums in our own country. To accomplish this, I struck in February, 1884, the following

circular letter, and mailed one to the warden of every state penitentiary and superintendent of every public lunatic asylum in the United States whose address I could obtain.

QUESTIONS TO LUNATIC ASYLUMS.

1. How many Inmates have you?
2. How many males?
3. How many females?
4. How many ever used intoxicating liquors as a beverage?
5. How many whose family history shows that both parents drank to excess?
6. How many whose family history shows that one parent drank to excess?

QUESTIONS TO PENITENTIARY.

1. How many Inmates in your State Penitentiary?
2. How many males?
3. How many females?
4. How many ever used intoxicating liquors to excess?
5. How many were under its influence when they committed the crime for which they are imprisoned, or believe that the use of alcoholic drinks had anything to do with the committal of said crime?

CAMERON, MO., Feby. 4, 1884.

DEAR SIR:—At the Annual Meeting of the Missouri State Medical Association, which met in Jefferson City, May 15th, 1883: T. E. Potter, M. D., Cameron, Mo.; C. H. Hughes, M. D., St. Louis, Mo., and B. F. Hart, M. D., Brownsville, Mo., were appointed as a Committee to Investigate the Relations Between Spirit Drinking and Insanity and Crime. (See Minutes of the State Medical Association, page 13). Can you aid us in our investigations, by answering the inclosed questions, or by referring us to any report coming from your institution whereby we can fill out said questions correctly so that our Report may be both scientific and authentic.

Please return list of questions with answers to

T. E. POTTER, M. D., Chairman, Cameron, Mo.

I have received replies from twenty-five different state penitentiaries and prisons and a number of lunatic asylums. I wish here to express my thanks to the officials of these institutions for their politeness and promptness in aiding me in my researches.

I have tabulated the statistics and reports received from the penitentiaries and prisons; but, owing to the imperfect way in which records are kept in the insane asylums, and from the difficulties that arise in getting the history of patients, the reports from asylums are not what I should like to have presented.

The following is a table showing the "Relation between Spirit Drinking and Crime."

TABLE SHOWING THE RELATION BETWEEN
CRIME AND SPIRIT DRINKING FROM
TWENTY-FIVE PENITENTIARIES AND
PRISONS IN THE UNITED STATES.

NAME OF STATE.	NAME OF INSTITUTION.	Number of inmates.	Number of males.	Number of females.	Number of those who are intemperate.	No. of those whose crime was caused by intemperance in any way.	Number of temperate.	REMARKS.
Arkansas.....	State Penitentiary at Little Rock	555	544	11	444	444	111	<p>"We have no statistics or data by which we can give the exact number. Judging from observations, for all murders, particularly with the white criminals, whisky was the cause. With the negro it is natural for them to steal; they can't help it."—<i>Warden Arkansas Penitentiary.</i></p> <p>"My information from the convicts themselves that nine-tenths were under the influence of strong drink at the time the crime was committed."—<i>J. W. Nelson, Warden.</i></p> <p><i>E. C. McMillan, Warden.</i></p>
Georgia.....	State Penitentiary at Atlanta....	1320	1284	36	1000	1189	320	<p>"DEAR SIR: In answer to your circular of April 23d, I will refer you to our last biennial report, page 69, statement 10, which will give as complete an answer to your questions as we are able to furnish. I will add that of 944 persons received here from Oct. 1st, 1882, to March 1st, 1884, 225 claimed to have been abstainers or temperate; 532 claimed to have been moderate drinkers; 237 admit to have been intemperate; total, 994. I send copy of report by to-day's mail.</p> <p>Yours Respectfully, <i>Gallus Miller, Clerk.</i>"</p>
Iowa.....	State Penitentiary at Ft. Madison.....	414	414	....	276	....	138	
Illinois.....	State Penitentiary at Joliet.....	1449	1424	25	884	....	565	

NAME OF STATE.	NAME OF INSTITUTION.	Number of inmates.....	Number of males.....	Number of females.....	Number of those who are intemperate.....	No. of those whose crime was caused by intemperance in any way.....	Number of temperate.....	REMARKS.
Massachusetts....	State Penitentiary at Warnerville.....	564	564	....	75 per c't.	50 per c't.	25 per c't.	<p>"DEAR SIR: The warden charges me with answering this application for facts, and I have to say that the statistics of this prison are not kept in such form as to permit the replies you desire. I have never kept any account of those who use strong drink sufficiently, but should say that a large majority (3-4 of the whole) of the inmates of this prison were addicted to its use, and 1-2 of them in liquor at the time of the committal of their crimes.</p> <p>Yours Respectfully, John W. Barnes, Chaplain."</p> <p>"This is taken from the Twenty-sixth Biennial Report of the Board of Directors of the city of Boston, Mass., for the year 1883. The number of offences for which the inmates of this institution were committed was 54; and out of the 10,403 there were 8,858 sent here for drunkenness and 1,645 for the remaining 53 offenses."</p> <p>Taken from the Biennial Report 1883.</p> <p>Eighty-three of this number for '81 from intemperate parentage.</p> <p>267 of this number, for '82 from intemperate parentage.</p> <p>Warden.</p> <p>The number temperate and intemperate based on report of number admitted in 1883.</p>
Massachusetts....	House of Industry on Deer Island, Boston..	10403	7807	2596	....	8858	....
Minnesota.....	State Prison at Faribault.....	279	....	....	168	....	111	
Michigan.....	State House of Correction at Ionia, Rec'd res'sly in '80, '81, '82	866	....	....	720	....	146	
Michigan.....	State Penitentiary at Jackson...	1267	....	....	964	....	303	
Maine.....	Name not given..	160	156	4	115	....	45	

NAME OF STATE.	NAME OF INSTITUTION.	Number of inmates.....	Number of males.....	Number of females.....	Number of those who are intemperate.....	No. of those whose crime was caused by intemperance in any way.....	Number of temperate.....	REMARKS.
Missouri	State Penitentiary at Jefferson City	1419	1394	25	1154	560	240	"Replying to your circular of the 6th of Feb. of the number 1394 males confined in the penitentiary on that day, 91 considered themselves drunkards; 397 steady drinkers; 666 occasional drinkers; 240 total abstainers; 560 attribute their crime to drink; 519 drunk when crime was committed."— <i>J. R. Willis, Warden, per R. D. Willis.</i>
New York.....	Sing Sing Prison	1483	1483	....	1374	....	109	Warden.
New York.....	State Prison at Auburn.....	882	882	....	519	645	237	"Our records show that 519 put themselves on record as intemperate, while 184 others through pride, and for various reasons, recorded themselves as "moderate drinkers." Sooner or latter most of these latter admit that strong drink was the cause of their downfall. The number, 645, shows those who admit that they were either drunk themselves at the time the crime was committed, or that they were with others who were intoxicated, and that intoxicants were the cause of their trouble."— <i>W. Searls, Chaplain.</i>
New York.....	State Prison at Denamara	523	523	....	60 per c't.	60 per c't.	40 per c't.	Warden.
North Carolina...	State Penitentiary at Raleigh....	982	920	62	....	....	....	"The numbers are given to Feb. 1st, 1884. Questions 4 and 5 are not asked on admission of prisoners.
New Hampshire..	State Prison at Concord.....	121	120	1	93	....	28	Very Respectfully, <i>John M. Flemming.</i> Taken from report of 1883.

NAME OF STATE.	NAME OF INSTITUTION.	Number of inmates.	Number of males.	Number of females.	Number of those who are intemperate.	No. of those whose crime was caused by intemperance in any way.	Number of temperate.	REMARKS.
Nebraska.....	State Penitentiary at Lincoln....	236	235	1	33 1/4 per c't.	20 per c't.	66 3/4 per c't.	Warden.
Ohio.....	State Penitentiary at Columbus	1406	1387	19	926	....	361	From report sent me by warden for year 1883.
Pennsylvania.....	Eastern Penitentiary at Philadelphia. Number admitted in year 1880.....	463	463	....	358	....	105	Taken from the report 1880. In 48 of these there were in the family hereditary diseases, especially those known as neuroses.
	Number admitted in the year 1881	433	433	....	335	....	98	Taken from report of 1881. In 65 there were in the family hereditary disease, especially those known as neuroses.
	Number admitted in the year 1882	417	417	....	341	....	76	Taken from report of 1882. In 107 there were in the family hereditary diseases, especially those known as neuroses.
Rhode Island.....	State Penitentiary at Howard...	87	84	3	....	....	....	Nearly all say that liquor was the cause, but it would be impossible for me to give the exact facts in each case.
South Carolina....	State Penitentiary at Columbia	865	828	37	414	20	451	"Enclosed please find '2 queries' received from you to-day answered as well as I could from our records. Ninety per cent. of the prisoners in our institutions are black, and the majority of negroes are addicted to strong drink whenever they can get it. The answer to the 5th is as near correct as possible without an absolute record. Yours Truly, J. I. Lipscomb, Sup't of Prison."

NAME OF STATE.	NAME OF INSTITUTION.	Number of inmates.....	Number of males.....	Number of females.....	Number of those who are intemperate.....	No. of those whose crime was caused by intemperance in any way.....	Number of temperate.....	REMARKS.
Tennessee.....	State Penitentiary near Nashville.....	1380	1333	47	1104	.....	276	<p>"I am not able to answer the 5th question, but believe a very high per cent., either directly or indirectly, can trace the cause of their misfortune to whisky. Our courts do not give us the specifications in their crimes, but send them for grades, such as larceny, murder, etc. I am of opinion that largely over two-thirds were caused by drunkenness.—<i>T. S. Harris, Warden.</i>"</p> <p>"MY DEAR SIR: Your circular letter of the 6th Feb. received and contents noted, and I regret that I have no statistics of recent dates bearing upon this subject to send you. I have mailed you to-day my last 'Biennial Report,' which covers up to Nov. 1st, 1882, and from that you may arrive at answer to question 4. Question 5 I have no figures whatever upon, but do not doubt proportion is large of those who committed crime was caused by excessive use of spirits. Regretting that I have not the data which would more materially aid you in your investigations, I am, sir, very respectfully, <i>T. J. Gara.</i>"</p>
Texas.....	State Penitentiary at Huntsville.....	2478	2446	32				
	Admitted into this institution from							
	1849 to 1860.....					406	39	
	1860 to 1870.....					1036	28	
	1870 to 1880.....					7226	287	
	1888 to 1882.....					1653	492	
Vermont.....	State Penitentiary at Brattleboro	86	85	1	51	30 to 35	35	<p>"We are unable to answer your last question with absolute accuracy, but give you our figures as nearly as we can learn."—<i>Sup't.</i></p>
Wisconsin.....	Name not given..	185	179	6	185	.....	35	Taken from report of prison, 1883.

We see from foregoing table that $33\frac{1}{3}$ to 95 per cent. of those imprisoned were intemperate, former number or per cent. being from Nebraska and latter from Sing Sing, New York, and Huntsville, Texas.

We find, from these letters, that the average of intemperance among criminals will reach at least 70 per cent.; and the number who believe that alcohol was in any way the cause of their crime furnishes the enormous amount of 75 per cent.

We observe, too, that climate or isothermal lines have but little if anything to do with the prevalence of this abuse.

The southern states of Georgia, Tennessee, Arkansas and Texas, do not show any higher per cent. of intemperance among this class than our northern states, Massachusetts, New York, Pennsylvania and Ohio. But the West, especially the "New West," Nebraska, Minnesota and Iowa give us better records. This may be due to two things. 1. Their records may not be so accurately kept. 2. The population of these new states being largely engaged in farming and like pursuits are not surrounded by the same temptations that assail men in older countries with densely populated cities.

"In England where special attention has been given to such questions, 75 per cent. of all crime and 25 per cent. of all cases of insanity are closely connected with the abuse of alcohol. It is still worse in Ireland. It has been ascertained that in Glasgow every three and twentieth, in Liverpool every twentieth, and in Dublin every tenth person accused of crime was found in this condition." (Ziemssen's *Cyclopedia of the Practice of Medicine*, p. 390, Vol. XV.)

Chief Justice Davis, in a speech delivered in Chickering Hall, on Tuesday, Feb. 26, 1884, said, "My twenty years' experience as judge has taught me that of all the causes of sin and misery, of sorrow and woe, of pauperism and wretchedness, intoxicating liquor stands forth the unapproachable chief."

I here present a report from insane asylums, consisting principally of extracts from letters received from the superintendents of those institutions, giving their opinions on the subject and the result of their observations; for, as I observed before, it is almost impossible to obtain information from records, as they are so imperfectly kept.

J. W. Ward, M. D., Superintendent of the Lunatic Asylum at Trenton, New Jersey, writes:

The question of nervous diseases following intemperance in the parent is one of the most important that can be considered by the student of psychology.

From Edward Crowler, M. D., Superintendent of McLean's Asylum, Somerville, Mass.:

Number of inmates, 165; 33 men and 15 women intemperate out of this number.

H. H. Gilman, M. D., Superintendent of the Iowa Hospital for the Insane at Mt. Pleasant, says:

I have no doubt that alcohol is directly the cause of more defective nervous organizations than all other causes combined; but statistics are woefully scarce and incomplete.

Superintendent of Dixmount Lunatic Asylum, Penn., writes:

Number of inmates, 517. Number who used alcohol to excess, would say in answer that no account is kept, but would say myself, something less than $\frac{1}{4}$. As to parents few were intemperate.

S. H. Sultz, M. D., Superintendent of Danville Lunatic Asylum, Pa., says:

71 males and 3 females were admitted whose insanity was due to drunkenness, making 74 out of 1,435 patients.

WESTERN LUNATIC ASYLUM,
HOPKINSVILLE, KY. }

"MY DEAR SIR:—You are aware of the difficulty that meets one in obtaining accurate and full histories of patients. Intemperance is given as a cause of insanity in about seven or eight tenths of the cases admitted since the opening of the asylum in 1854."

JAS. RODMAN, Supt.,

Per B. F. ESGERD, Ass't Physician.

From H. Wardner, M. D., Superintendent of the Illinois Southern Hospital for the Insane, Anna, Ill.:

DEAR SIR:—The records of this hospital were too imperfect to afford the information desired for the first five years of this asylum's existence; and are not sufficiently explicit since that time, as it is very difficult to get the truth about various habits. I have no doubt, if the facts could be ascertained, that 25 per cent. of all cases of insanity are due to intemperance directly or indirectly. We often have cases come in when the cause is given as domestic trouble, business, etc., when it is nothing more or less than whisky. Edwards County, in this state, has not had a licensed saloon for 15 years. Its jail is usually empty, poor house poorly patronized, as is also the insane asylum.

From the Superintendent of Illinois Central Hospital for the Insane:

Number of inmates, 640. Number who ever used intoxicants as a beverage, 42. Number whose family history shows that one parent was insane, 8.

I have a number of other letters and reports from asylums of different states; but they are so indefinite, that I do not care to incorporate them in this paper; as they do not throw any more light upon our subject.

Judging from these extracts, which, perhaps, represent the truth, as nearly as we can read it, I think the opinion of Dr. Wardner, of the Southern Hospital for the Insane of the state of Illinois, is correct when he says, that 25 per cent. of all cases of Insanity are due to intemperance, directly or indirectly.

The best authors are in many instances full and complete. I have incorporated a few of their valuable opinions.

Griesinger, in his work on Mental Pathology and Therapeutics, says, on p. 119: "Drunkenness stands midway between psychical and physical causes; its effects are very powerful as well as very complex." On p. 120 we find the following: "The children of drunkards very frequently die early from convulsions; many of them are idiots, imbeciles, or microcephalic; or in later life they present the same disposition to drunkenness, insanity, and crime." "We cannot state generally to what extent drunkenness acts in the production of the mental diseases ordinarily met with in asylums; the various nations present in this respect very great differences, and the statistics which we possess can be only to a slight extent compared, because delirium tremens is sometimes included and sometimes not. Among 747 cases Halloran found drunkenness given as a cause in more than one-fifth.

Prichard and Esquirol ascribe half of the attacks in England to this cause. In 1848, Webster in Bedlam (704 cases) found this to be a cause in only one-eighth to one-ninth of the cases; Morrison in Bedlam (1428 cases) in scarcely one-eighth and amongst these are certainly included several cases of delirium tremens. It is generally known that in the later times the abuse of spirits has very much diminished in England, and this cause has proportionately decreased in the etiological lists of the asylums.

"I have been assured by very competent authorities in England that this gratifying result is to be attributed, not to temperance societies but to the influence of the corn laws. At the present time, drunkenness nowhere appears to be such a powerful cause of mental disease as in America. Rush gives this as the cause of one-third of the cases in the hospitals of Pennsylvania, and later statistics of certain American asylums show even a larger pro-

portion. From Germany we have important statistics from Jacobi, Bergeman, (for Hanover one-sixth); Dagonet (1856) for Stephensfeld gives one-eighth to one-ninth of the cases as the average."

Henry Maudsley, M. D., F. R. C. P. of London, states in Reynold's System of Medicine, Vol. I. p. 589, "Of the physical causes of insanity, intemperance occupies the first place, acting not only as a direct cause; but indirectly through the emotional agitation incident to an irregular life of dissipation and excess."

Edmund A. Parker, M. D., F. R. S., says, "There is no question that several brain diseases, including some cases of insanity, are produced by excess of alcohol." (Parker's Practical Hygiene, Vol. I, p. 314.)

Wm. B. Carpenter, M. D., of London, the eminent physiologist and author, speaking of the influence of parents upon their offspring says: "In nothing is this more obvious than in the influence of alcoholic excesses on the part of one or both parents, in producing idiocy, a predisposition to insanity, or weakness or instability of mind in the children, this being especially the case where both parents have transgressed. Thus out of 359 idiots the condition of whose progenitors could be ascertained, it was found that no fewer than 99 were the children of absolute drunkards, and there was reason to believe that a large proportion of the parents of the remainder were more or less intemperate, only about a quarter of the whole number of idiots having been found to be the children of parents who were known to be temperate. And it is perfectly well known to those who are conversant with insanity, that of all the predisposing causes of that disorder, habits of intemperance on the part of either or both parents are among the most frequent."

The same author, in a lecture delivered in Boston, December 3d, 1883, said: "Now there can be no doubt that the habitual use of alcohol tends so to modify the nutrition of the nervous substance as to shape it, so to speak, into an accordance with itself; and this will be especially the case in the early period of life in which the bodily constitution (and with it in a great degree the mental) is being fixed and rendered permanent. A

habit of dependence upon alcoholic stimulants thus grows up, which may rise into irrepressible craving. * * * There is one more consideration I would especially urge upon you. The psychical deterioration produced by alcoholic indulgence, in the nervous system, is one which has a peculiar tendency to hereditary transmissions, insanity, idiocy, instability of mind, weakness of will, and especially the craving for alcoholics, presenting themselves so much more frequently in the offspring of the habitually intemperate, than in those of habitual water drinkers, that there cannot be any reasonable doubt, that the sins of the fathers, or mothers, are here most fearfully visited on the children."

Boehm, of Germany, gives us a clear and forcible description of the results of the alcoholic poison, in Ziemssen's *Encyclopedia of the Practice of Medicine*, vol. xv, page 406. He says: "In the first place we must mention a number of psychical disorders, which are, if we may say so, specially characterized by their want of character, or want of individuality; reminding us of the moral insanity which has lately given rise to so much discussion. In such cases we really do not know if the craving for drink, the alcohol mania, be the original cause of the malady, or whether we must not regard the craving as itself one of the symptoms, unless, indeed, we have watched the development of the disease from its very beginning. Continual struggling with temptation, and continual yielding to it, reduce the man who was a well meaning person to a state of irreconcilable conflict and dissension with himself, with duty and with the world around him. Although, at first, their intellectual powers are as strong as ever, such persons suffer severely from great anomalies of the passions and affections, and from a condition of deep melancholy, which is often associated with a tendency to kill themselves, and they strive to rid themselves of these feelings by continual resort to their one remedy of fresh indulgence in alcohol. Their powers of resistance grow gradually weaker and weaker, while, at the same time, step by step, their intellectual powers grow more and more feeble. The man is now capable of committing crime in order to satisfy the cravings which are now his one ruling passion.

In this category we often find men of position and eminence, high class men in every sense. And just in proportion to the original development of what we may call the higher ethics, is the psychical conflict increased, and is the completeness of the moral ruin. Sots of the lower order do not fall so low because they have never climbed so high. * * * Comparatively few are ever reclaimed, in the long run. The great majority, indeed, perish by intercurrent diseases, or are attacked by general paralysis, or some one of the psychical anomalies from which the sufferer develops into a dementia which is strongly tinged with gloom."

Dr. Richardson, of London, in his work, "Alcohol," p. 114, gives utterance to his views and experience by saying, "Not one of the transmitted wrongs, physical or mental, are more certainly passed on to those yet unborn than the wrongs inflicted by alcohol."

When we consider this array of evidence, coming as it does from such reliable sources, wardens and superintendents of penal and charitable institutions, the best authors and teachers in our noble profession, who have spent their lives in the study of nervous diseases and have been close, scrutinizing, and unprejudiced observers, and find there is not a single voice impeaching this testimony; what can we do, but condemn in the strongest terms the *use* and *abuse* of alcohol as a beverage, that indulgence which heaps upon its victims and those connected with them, by blood or otherwise, the most frightful of all afflictions a perverted mind, and a deranged intellectual organism; ay, robs man of all that makes him supreme, that renders him superior to the rest of the animal world, his morals and his mind!

In concluding this report we wish to consider two propositions:

1. What is the pathological condition following the abuse of alcohol?
2. Is a man legally responsible for his acts, when suffering from chronic alcoholism?

First proposition. What is the pathological condition after the abuse of alcohol?

All investigators of note when writing upon this subject tell

us that it paralyzes the vaso-motor nerves. As evidence of this we see the injected eye, the red nose and the flushed face.

Dr. Richardson says: "I once had the unusual, though unhappy, opportunity of observing the same phenomena in the brain structure of a man, who, in a paroxysm of alcoholic excitement, decapitated himself under the wheel of a railway carriage, whose brain was instantly evolved from the skull by the crash. The brain itself, entire, was before me within three minutes after the death. It exhaled the odor of whisky most distinctly, and its membranes and minute structure were vascular in the extreme. It looked as if it had been recently injected with vermilion. The white matter of the cerebrum studded with red points could scarcely be distinguished, when it was incised by its natural whiteness, and the pia-mater or internal vascular membrane covering the brain resembled a delicate web of coagulated red blood, so tensely were its fine vessels engorged." (*Lectures on Alcohol*, page 53.)

Anstie demonstrated its effect upon the brain by applying it to a living nerve. He says: "If we surround a living nerve (partially dissected from its connections) with alcohol of a certain strength, we find that it becomes paralyzed, i. e., incapable of transmitting impressions through its affected parts, while a very weak mixture of alcohol and water is incapable of producing this effect (*Reynolds' Practice of Med.* vol. 1, page 671.)

As alcohol undergoes no catalytic change when taken, is not digested, but is absorbed into the blood as pure alcohol, it bathes the tissues with itself, as was proved by the odor in the Richardson case; paralyzing the vaso-motor nerves, also the gray cells which lie so thickly under the pia-mater, thereby destroying the physiological action of the cerebrum first. This we see by a want of power to reason when first coming under its influence; perception and sensation are blunted, causing the external world to be presented in an incorrect and perverted way, and exciting the passions, which, unrestrained, propel the party to acts of lawlessness. The gray cells of the cerebellum next succumb and the power of co-ordination is lost, and the individual can no longer walk. Lastly, the medulla oblongata is involved; which

fact was also demonstrated in the Richardson case. As this is the centre presiding over the more vital organs, such as circulation and respiration, we see at a glance that death is at hand and almost inevitable.

This abuse will produce chronic congestion, and a general change of all the nerve centers, especially in its physiological action; also, hypertrophy of the fibrous tissue of the brain and general inaction from pressure.

Dr. T. S. Wright, of Bellefontaine, Ohio, in a manuscript sent me by Dr. C. H. Hughes, of St. Louis, which I regard as the best exposition of the pathological condition of chronic alcoholism, says: "It is a fact recognized by competent authorities without exception that persistent and habitual use of alcohol strongly tends to produce an increase of fibrous tissue in various portions of the body, as the liver, kidneys, stomach and brain. If the increase of this interstitial tissue in the brain is considerable, it will produce a pressure upon the nerve cells, and nerve tubes, as well as cause derangement of nervous function, which, from the nature of the trouble, must be uncontrollable by the patient. But, further, in such instances there invariably occurs after a time this superabundant substance. This contraction strangles blood vessels, interfering thus with the proper nutrition of the nervous substance; and, besides, it displaces and ruptures nerve fibres. Again, in well marked instances of this same difficulty, the nerve cells which are the centres of thought and feeling become, many of them, changed in structure. They undergo various forms of degeneration; some become discolored, others appear calcareous or bony, and others still are at first fatty, and finally disappear by absorption. It would be folly to claim that any one suffering from such a morbid condition of the brain as this should be held morally or legally responsible for his acts."

Second proposition. Is a man legally responsible for his acts, when suffering from chronic alcoholism?

Before attempting to answer our last question, allow me to present for your candid consideration a few facts.

When a man commits the highest crime known in our country, that of taking, in "cold blood," the life of one of his fellow

men, if it can be clearly proven that he was insane at the time he does not suffer capital punishment, nor is he incarcerated in a state penitentiary. He is sent to an insane asylum for treatment hoping that in time his reason may be restored, and when this is accomplished the man is set at liberty. Now there is no doubt that a man under the influence of liquor, let the alcoholism be acute or chronic, is as undoubtedly insane from physical causes as a man insane from any other physical cause. Drunkenness is the truest type of acute mania.

Maudsley, in his work "Body and Mind," page 91, says "Alcohol yields us, in its direct effects, the abstract and brief chronicle of a course of mania."

Now to answer our question. A man is not, in one sense, legally responsible for his acts when suffering from chronic alcoholism. The query then arises, who is responsible, and what should be done with such unfortunate persons? Let us investigate. Our government, while recognizing that the sale and use of alcohol is an alarming evil, instead of making every effort for its suppression seems rather to encourage the traffic; for we find that in the year 1882 the sale of alcohol yielded a revenue of \$86,000,000 to the United States, and in 1879 Massachusetts punished by fine and imprisonment 14,000 inebriates; New York, in 1880, 54,000 for the same offense, while other states contend with the evil in like proportion.

Now, if men owing to the influences surrounding them, such influences being caused by the legislation of their own government, are reduced to insanity and such a state of mind that they can no longer control their own actions, that government is legally and morally responsible, and should, in my judgment, institute and support, at its own expense, inebriate asylums that will furnish comfortable and respectable homes for those in this deplorable condition. There they may possibly in time be reclaimed and enabled to make amends for what they have done.

Gentlemen of the Missouri State Medical Association—I cannot close this paper without a personal appeal to each member of this honorable body to use his influence in every way to present this question to the people in such a manner that they may be induced to think clearly on the subject, and to consider it from

a scientific standpoint. Then, so thinking, and so considering, they will understand the dangerous ground upon which our nation stands, and will exclaim, as with one mighty voice, "Let us no longer tolerate this abuse in our midst! Let us put this evil from our country! Let us break the chains of intemperance that have enslaved us for so many years, and be, in fact, a great and free people!"

REPORT OF AN EPIDEMIC.

BY H. V. FERRELL, M. D. CARTERVILLE, ILL.

[*Read before the Southern Illinois Medical Association.*]

ABOUT the 7th day of last March, I was called upon to treat Mr. R., whose family consisted of himself and wife, and lived in an isolated, shut up place, but in a thickly settled neighborhood.

He was born and raised in the vicinity, had never been but a few miles from home, and during the past winter and up to the time of his sickness had been at and near home; and after the most careful inquiry I am sure he had not been in contact with, nor near, any eruptive disease, nor had any eruptive disease been seen or heard of in any of the neighborhoods, or adjoining neighborhoods where he had been for months past.

The disease, a general description of which I will endeavor to give, affected next his wife, and, by means of three neighboring women who waited upon her, was communicated to three neighboring families, numbering in the aggregate, eighteen persons, all of whom were subsequently affected with the disease—making a total to the present time of twenty cases.

The first case, Mr. R., which was one of the mildest, began as a cold, with threatening pneumonia; after three or four days an eruption came out, the fever and other symptoms subsided, and the patient soon regained his usual health. In about two weeks his wife was taken sick with high fever, severe headache, backache, sick stomach, pain in the limbs, etc. In three or four days

the eruption began to appear upon the forehead and face as little red pimples, surmounted by little vesicles of the size of a pinhead, the number and size of which increased till, by the third or fourth day from that time, she was covered from the crown of the head to the soles of the feet. The vesicles, which were situated upon an elevated base or mound, were surrounded by a red line or areola, and varied in size from the head of a pin to the size of a nickel. Nearly all of them were oval shaped on top, some were umbilicated or depressed in the centre, with raised margins. Some contained pus toward the close of the disease, though all were filled with serum at the beginning.

A puncture made at one point would empty the entire vesicle, showing them to be unicellular. They were the source of an intolerable itching. The skin, where not involved in the disease, appeared healthy. In other cases which I saw, the vesicle had more the appearance of blisters made by hot water, running together, covering almost the entire face and body, and for the time disfiguring the patients beyond all recognition. They extended to the mucous membrane of the mouth, throat, eyes and nose. Some of the blisters or vesicles were dark colored from the extravasation of blood.

There was not noted a hard, shotty, but a thickened condition of the skin prior to the appearance of the eruption. Except the sick stomach there was not noted any derangement of the abdominal or thoracic viscera, except in one case, that of a child, which presented some diphtheritic symptoms. The previous health, constitution, and hygienic surroundings of the patients had been equal to the average of country people.

Passing from this general description, we may note a pretty uniform course for the disease. The stage of incubation was about two weeks, sometimes more, rarely, if ever, less. The period of invasion was generally about three or four days, during which, in severe cases, numbering twelve out of the twenty, the patient suffered from high fever, severe headache, backache, sick stomach, pain in the limbs, and, in two cases, children, convulsions. When the eruption came out, these symptoms disappeared, and, barring the excessive itching and boils in some cases, the patients were generally quite comfortable. There was no second-

ary fever, and the period of desquamation appeared usually eight or nine days after the eruption, and required two or three weeks for its completion. The desquamation was in scales or flecks, resembling the shedding of a snake, that from the palms of the hands and soles of the feet coming off almost entire. There were no scabs. The appearance of the patients after desquamation was completed—in the severe cases—bore a striking resemblance to the pittings of small-pox, the main difference in the appearance to my mind being that they were too generally diffused for small-pox. In the milder cases there were no markings at all, or only superficial, brownish discolorations of the skin. The markings and discolorations seem to be disappearing; but they are too recent to speak definitely upon that point. It is my opinion that in some of the cases, at least, the markings will be permanent. The great peculiarity of the contagion seems to be that it required a continuous exposure. Both children and adults were exposed for a brief period without ever contracting the disease—others were repeatedly exposed for a short time without contracting the disease, but afterward contracted it when continuously exposed. Not a single individual contracted the disease from brief exposure, and not one escaped it after a continuous exposure. In one instance, a young man of twenty-one with the eruption fully out upon him went about his work, mingling freely with people upon the streets without a single person contracting the disease from him. Those who nursed and handled the patients seemed to contract the disease more readily than others of the family who, though living in the same house, had no such close relationship with the sick. The attempt was made to save members of the family from its attack by preventing all contact with the sick, but without success. In other words, the disease was contagious, and not infectious—in the sense of requiring actual contact of the sick and well, either directly or indirectly.

It appears that the contagion is not sufficiently intense, like that of small-pox, measles, scarlatina, whooping cough, etc., to at once communicate itself from the sick to the well; but that it requires time for a continuous action before the system can take in, as it were, enough of the poison to insure an attack. How

long a time that is, we are not able to say definitely. We can say, however, that persons were exposed for as long a period as a day and night, without contracting the disease. The instances of such brief exposure were numerous, in several instances the same individual being repeatedly exposed.

Four of the patients, all adults, and including the first one attacked, had been vaccinated, and in all of them the disease was mild—in four others, children, who had never been vaccinated, the disease was almost, or quite, as mild. I have vaccinated thirteen of those who had completely recovered from the disease. I used bovine virus just obtained from the Jenner vaccine farm in Pennsylvania. It was fairly tried in other cases and found to be good.

Of the thirteen cases vaccinated, two had been previously vaccinated, the balance had not. In only two or three cases did the vaccination take at all, and in them, although they had never been vaccinated before, it was slight, and presented the characters of a secondary vaccination. Although the mortality was *nil*, the sufferings of the patients in the severe cases were extreme, and in at least three cases death was doubtless imminent.

As to treatment, it was conducted upon general principles. Local anodyne applications to relieve the excessive itching, and febrifuges and cerebral sedatives during the stage of invasion, when indicated.

The disease began, as stated, March 7th, last, and the last cases are now just recovered. No other cases, as far as known.

The first case of this disease either originated spontaneously, or arose from an exposure so slight as to have, so far, resisted detection. It differs from small-pox in several important particulars, chief of which are the unicellular character of the vesicles, the absence of secondary fever, the absence of the shotty feel of the skin preceding the eruption, the length of time required for communication from the sick to the well, the absence of scabs in desquamation, the absence of odor, and, finally, the want of any mortality. On the other hand, it resembles small-pox in the length of the periods of incubation, invasion and desquamation, and still more clearly in the symptoms preceding the eruption, as well as in the appear-

ance of the patients after recovery. As stated, the vesicles were unicellular, and left pittings. I was surprised at that, as I had supposed the pittings of small-pox to depend upon the multicellular character of the vesicles. The modified form of the disease in the four individuals who had previously been vaccinated might be offset by the fact that it was almost or quite as mild in four children who had never been vaccinated. But the failure to vaccinate the large majority of those upon whom I tried vaccination after their recovery, together with the extreme mildness of the vaccinia in the small minority upon whom it took at all, taken in connection with the other points of resemblance between this disease and small-pox, forces me to the conclusion that there is somewhere a connecting link between the two diseases. In our efforts to classify the disease, we fail to find any description laid down in late works that will apply to it. Neither impetigo contagiosa, nor any of the forms of eczema are large enough to take it all in. Variola benigna or modified small-pox, as hinted at by writers, might do so if the description of that disease was complete. But none of the authorities I have consulted give a description of it full enough to enable me to tell in what particulars the disease was modified.

Fortunately for me, I am not compelled to name it, but can content myself with giving you the facts as I have observed them, and trust to your superior knowledge and experience for further classification and elucidation.

Cartersville, Ill., June 16th, 1884.

EXCISION OF THE RECTUM FOR CANCER; OPERATION.

BY WALTER COLES, M. D., ST. LOUIS, MO.

ALTHOUGH a few of the older surgeons on several occasions removed the lower end of the rectum in cases of cancer, the operation proved so bloody and unfortunate in its results that it was finally pretty much abandoned as a practical surgical procedure, until, mainly through the boldness and success of Dieffenbach and Billroth, it was reinstated and popularized on

the continent of Europe. Up to the year 1877, when Dr. J. B. Roberts presented an elaborate history of the operation to the *Philadelphia County Medical Society*, together with an account of a case operated upon by Dr. R. J. Levis, but few in America had ventured upon this hitherto uncultivated field of surgery. The first case reported by Dr. Levis was very successful in its results, and, notwithstanding the fact that two subsequent operations proved fatal, the attention of the profession in this country was thus directed to the operation, and the success attending it in Europe has placed it upon a firm surgical footing.

Instead of leaving a patient to perish by a most certain and miserable death, it is now held by the best authorities that cancer of the rectum should be dealt with according to the same rules which govern us when the disease is located elsewhere; that is to say, it should be freely extirpated in all suitable cases. In his recent surgical treatise Dr. D. Hayes Agnew thus expresses himself in regard to excision of the rectum. "The conditions which in my judgment justify the operation are the following: 1st. When the disease is epithelial in character; 2nd. When it is limited to the walls of the intestine; 3d. When there is room to remove the bowel without implicating the peritoneum, and, 4th. When the health of the patient is not seriously impaired by the disease." (Vol. I. p. 436).

Every operation for cancer may be regarded as a bold strike for health and life. If left merely to palliative measures, a brief and loathsome existence, ending in a painful death, is all that experience has taught us to expect. No conscientious surgeon would dare hold out any positive assurance of permanent cure in such cases, although there are undoubtedly many instances where epithelioma has been removed never to return. The best that we can say is that if the patient survives the operation, life will be prolonged in comfort, with a fair prospect of ultimate good health and perfect recovery. The most frequent form of cancer affecting the rectum is epithelioma, which is the least malignant and most amenable to radical treatment of any with which we have to deal. Hence there is more reason to hope for encouraging results in this locality than in many others.

While excision of the rectum has not been practised as a generally recognized surgical procedure for a sufficient length of time to establish a reliable ratio of *permanent cures*, the results, so far, are eminently satisfactory. Dr. Schmidt of Leipzig, has compiled a table of 33 cases, collected from various sources, in which he reports 20 as *cured*; 8 as having died; while in 5 the result was not satisfactory; and it is fair to presume that in these the disease returned. Making every allowance for a possible and probable relapse at a later period in some of those cases claimed as "*cured*," there is still left a broad margin of hope to those who survive the immediate hazards of this formidable operation.

The dangers attending excision of the rectum are hemorrhage, collapse, embolism in the liver and lungs, abscess, pyemia, phlebitis, cellulitis and peritonitis.

While some operators claim to have encountered but slight hemorrhage, in some instances meeting with no vessels requiring ligation, it is clear that such an experience must be quite exceptional, if we take into consideration the vascularity of the region involved. It is true that none of the arterial branches are very large, but they are quite numerous, and unless promptly ligated, considerable blood may be lost from the superficial branches of the internal transverse perineal and hemorrhoidal pudic arteries. It is well to secure every bleeding vessel, even though it appears to be insignificant, so as to guard against secondary hemorrhage after reaction shall have taken place, which may prove an awkward and dangerous complication. The open mouths of the hemorrhoidal branches of the inferior mesenteric vein endanger the patient's life from embolism in the liver and lungs. This was probably the cause of death in at least one of Dr. Levis' cases, as also in the hands of several other surgeons.

The close proximity of the vagina and uterus in the female, of the urethra, prostate gland and bladder in the male, and of the peritoneum in both, must be borne in mind in this operation. The first step is to free the bowel from its surrounding attachments, so as to allow of several inches being drawn down. The amount brought down must be sufficient to enable the operator to sever the bowel above the seat of disease; hence it is not safe to recommend rectotomy in cases where the morbid growth ex-

tends beyond reach of the finger. Whenever the finger introduced into the anus can pass above the limits of disease and reach healthy tissue, it is possible to so loosen the attachments of the gut that by traction its folds and curves will become obliterated and enable one without difficulty to draw down three or four inches beyond the anal outlet, which can be then cut off and the stump stitched to the skin as will be presently described. The rectum is surrounded by loose cellular tissues posteriorly and on each side, but anteriorly it requires great care in separating it from the urethra, prostate gland and bladder in the male, and from the vagina in the female. This should be done mainly with the finger aided by the handle of a scalpel. In men a metallic staff should be introduced into the bladder so as to steady the parts and act as a guide. It is only in front, in ordinary cases, that we are likely to encroach upon the peritoneum, which has been injured with fatal results on several occasions. In the male this membrane is reflected from the bladder to the rectum; in the female it forms the utero-rectal *cul de sac*. The precise distance between the peritoneum and the anus varies in different subjects, and concerning this widely different estimates have been made by authorities. According to Roberts, Lisfranc gave the distance at six inches in women and four inches in men; while Malgaigne puts it at two inches in the female and two or three in the male; Blandin at three inches in man and one and a half in woman. Vidal made measurements on several subjects, and ascertained that the mean was less than two inches in females and below that of men in every instance. Dr. Roberts, in the paper already alluded to, reports a series of experiments and measurements on the dead subject which are full of interest, and tend to show how it is possible to excise three or four inches of bowel, although the peritoneum encroaches to within half, or less than half that distance to the anus. Measuring while the parts were *in situ*, he ascertained that the average distance from the anus to the lowest attachment of peritoneum to the rectum was, in men, 1.58 inches, and in women 1.37 inches. When, however, the bowel was dissected loose and its folds and curves straightened out, he found the distance to be 3.88 inches in males, and 3.64 in females. This redundancy in the bowel is thus developed, so

to speak, in the process of operating; and when the part is freed of its attachments, the elastic gut falls down and hangs outside the body. Nevertheless, this fact does not lessen the precautions necessary in dissecting out the bowel anteriorly, seeing that the peritoneum is much closer to the anus than is generally supposed, and nearer in women than in men.

There are other sequelæ which are worthy of consideration. One of the most important is the impaired power of retention of feces and flatus, which is the immediate and necessary consequence of removal of the lower end of the rectum, including of course the internal sphincter. It has been found however, that most patients gradually regain control of the bowel after this operation; especially is this the case when the disease is internal and does not involve the external sphincter, so as to admit of more or less complete preservation of the latter muscle. Under normal circumstances the lower portion of the rectum is empty, hence there need be no great trouble from incontinence of feces unless the stools are liquid. In time nature seems to provide a subsidiary sphincter in the amputated bowel, which in most cases gives the patient sufficient warning and control over the function of defecation to enable him to comply with the wants of nature without accident. This fact is a point of great importance, since it removes a serious objection to the operation.

Usually the stitches which secure the stump of the rectum to the external skin cut through, and more or less retraction of the bowel results. The intermediate space, however, heals over and presents a smooth appearance, not unlike mucous membrane. There may supervene some contraction of this tissue, producing more or less stricture, but if this should prove serious, it is much more easily dealt with than the original malady.

In order to promote speedy recovery and prevent the burrowing of pus after this operation, it is of importance to secure thorough drainage and complete cleanliness. The manner in which this is done will be more fully described in detailing the following case:

The patient, a lady aged 35, mother of six children, the

youngest eight months old, came to St. Louis from Kentucky, and consulted me April 27th, 1884. She was thin, pale and nervous. On account of ill health she had weaned her baby one month before leaving home. She stated that since the birth of her last child there was a sensation of a lump within the rectum; constipation had existed, and the passages were attended with intense pain and a bloody discharge. For some time she suspected internal hemorrhoids, but as the symptoms continued with increased severity, she finally and reluctantly consented to an examination by her family physician in the month of December last; he stretched the bowel and prescribed aperients, which rendered her condition more comfortable for a time. It was not long, however, before defecation was again attended with intolerable distress and increased bleeding; the bowel was again stretched with marked relief, so far as the pain was concerned.

When the patient came to me she was ignorant of the true nature of her disease—supposing it to be a simple fissure at most—and was exceedingly despondent that she had not recovered under the treatment received. On May 2d I explored the rectum thoroughly under chloroform, with Dr. I. G. W. Steedman, and discovered an epithelial cancer of irregular outline situated within the external sphincter and involving two and a quarter inches of the anterior wall and extending around on the left side to the posterior surface of the bowel, thus embracing nearly three-fourths of its entire circumference. On the left side there was quite a deep fissure commencing above the verge of the anus and extending into the cancerous growth. The diseased mass was quite movable under the finger, and while it involved the superficial muscular tissue of the gut, it could be easily slid over the healthy mucous lining of the vagina.

With the full concurrence of Dr. Steedman it was decided to make known to the patient the desperate nature of her disease, and at the same time inform her that the only possible hope was through a radical operation, the case being deemed a favorable one for surgical interference.

The friends desiring that Dr. H. H. Mudd should see the case, he met me in consultation and advised an operation so soon as the general health should be partially reinstated. Under tonic

treatment the patient's condition so improved that by the 3d of June it was deemed safe to operate; Drs. Steedman, Maughs, Briggs, Bond, Engelmann and Nelson being present and assisting.

The bowels having been freely moved by a dose of castor oil administered the night before, the patient, chloroformed, was placed upon a table with the limbs held in the lithotomy position. A straight cut was made from within half an inch of the vaginal outlet across the anus, and extended backwards to within an inch of the os coccygis. A circular incision was then made on each side, within the verge of the anus—which was fortunately not involved in this case—and the skin and fibres of the external sphincter carefully dissected back; in doing this several arteries had to be tied, both ends of the ligature being cut off short. Commencing behind, by means of the fingers and scalpel, the cellular attachments of the bowel were torn asunder so as to allow a portion of the hand to be passed within the hollow of the sacrum, and the dissection continued into each ischiatic fossa. Having freed the rectum posteriorly and at each side, and secured all bleeding vessels, the bowel was carefully separated from the vagina, until by gentle traction about three inches was brought down. The protruding portion was next divided longitudinally for two and a half inches in its posterior aspect, with scissors, so that its interior surface could be plainly seen. A half dozen silver wires were then passed, with a Peaslee's needle, deeply through the surrounding skin and made to penetrate the walls of the rectum some distance above the line of disease. These wires were not immediately secured, but the bowel was held in position, while by means of scissors it was severed between the wires and the diseased tissue. The amputation was done in successive steps, so as to secure each bleeding vessel as it was cut. The open cavity was then carefully syringed out with carbolized water, sprinkled with iodoform, the parts brought together, the wire sutures secured with perforated shot, and clipped off close. Before closing the wound two small rubber drainage tubes were placed, one in each ischiatic fossa, and brought out posteriorly through the cut immediately in front of the coccyx, which was left patulous. The incision in the perin-

eum was brought together by a deep wire suture, the parts sponged off, a dressing of carbolized oil applied, and the patient put to bed.

She had borne the chloroform badly and was alarmingly depressed towards the close of the operation, requiring frequent hypodermic injections of brandy; but by the aid of bottles of hot water and warm covering, reaction soon set in, and in the course of a few hours she had rallied and was doing well.

A quarter of a grain of morphine sulph. was injected under the skin and after a refreshing night's rest, she awoke next morning feeling quite comfortable. Five grains of quinine and one-sixth of a grain of morphia were ordered the next day to be repeated every four hours. The urine was drawn off with a catheter for the first ten days after the operation.

During the first twenty-four hours there was an abundant discharge of bloody serum from the wound. On the third day the bowels moved freely, without pain, and from this time on evacuations occurred every day, or every second day, but at no time occasioning the slightest distress. There being little or no discharge after the second day, the drainage tubes were removed. The wound healed with remarkable celerity; there was never any marked soreness, irritation of the bladder, or tympanites. On the eighth day there was a slight discharge of pus from the posterior opening in front of the coccyx. On the fifth day the suture in the perineal incision was removed, union being complete; on the tenth day four of the stitches were removed from the rectum, the others being allowed to remain two days longer. An examination with the finger revealed a retraction of nearly an inch and a half in the stump of the rectum, the parts, however, were healing very satisfactorily; there was also decided contractility in the external sphincter.

In this case the temperature was at no time high, its maximum being $101\frac{1}{2}^{\circ}$ on the morning of the third day, at which time the pulse was 94. After this the temperature gradually sank, until the tenth day, when it became normal. On the fifteenth day the patient was able to sit up, and at the end of a month the parts were about completely healed. On examination internally with the finger, the surface of the rectum was found to be soft and healthy,

while the muscular fibres of the bowel presented a decided power of contraction.

The control over the function of defecation is daily becoming more satisfactory, and there is every reason to believe that in a short time it will be practically complete.

The extraordinary rapidity with which the healing process occurred in this case is, I think, largely due to the ample provision which was made for thorough drainage. With this view the superficial intermediate stitches, recommended by some operators, were omitted and drainage tubes temporarily introduced.

MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION.—In accordance with the request of the permanent secretary, we take pleasure in calling attention to the resolution adopted at the meeting of the American Medical Association in May. If this Association with its journal is to be of any such value and importance to the profession of the United States as the British Medical Association and its journal are to the profession in Great Britain, they must receive the hearty support of the profession throughout the country. It is to be noticed that the payment of annual dues of five dollars to the secretary, Dr. R. J. Dunglison, Lock box 1274, Philadelphia, Pa., entitles the person so paying to the Journal of the Association for the year for which the dues are paid. The following is the resolution:

“Membership in the Association shall be obtainable by any member of a state or county medical society recognized by the association, upon application indorsed by the president and secretary of said society, and shall be retained so long as he shall remain in good standing in his local society, and shall pay his annual dues to the association.”

MEDICAL ETHICS.—Dr. Edmund Andrews, in his address as president of the Illinois State Medical Society, remarked that there are three essential principles of medical ethics, viz., 1. The physician must bring to his work a thorough knowledge of his profession; 2. He must use that knowledge diligently and honestly for the benefit of his patients; 3. He must shape all his conduct towards his patrons and his medical brethren in the spirit of honor, kindness and generosity.

CASES FROM PRACTICE.

OVARIAN TUMOR IN A CHILD.

BY DR. EDW. EVERS, ST. LOUIS.

Ovarian tumors in young children are sufficiently rare to warrant the publication of every case observed. The following occurred in the practice of Dr. U. Harder, of this city. A little girl, two and a half years old, was taken sick in the latter part of March. When the doctor first saw the girl she was suffering with a low form of fever, the temperature curve resembling that of typhoid fever. There was a moderate distension of the lower part of the abdomen, which was said to have been noticed a short time before, but to have disappeared only to reappear with the fever.

Under the treatment adopted the fever disappeared entirely at the end of a week; but the enlargement of the abdomen increased so rapidly, that when I saw the child in consultation with the doctor five weeks after it was first taken sick, the little girl measured 26 inches over the umbilicus. The abdomen was occupied by a solid tumor, extending about an inch above the umbilicus, and apparently a little further on the right side than on the left. Both lower extremities were edematous, as also the integuments of the abdomen and of the lower part of the back; the superficial veins of the thorax and abdomen were very much enlarged, forming a beautiful blue network over the entire anterior surface of the body. The tumor was not movable in any direction, nor was it at all painful on pressure; the breathing was rapid and shallow, though there were at that time no signs of bronchitis or pulmonary trouble. The child had absolutely no fever; her appetite was good; her bowels moved regularly and naturally; the urine was normal in quantity and quality. My first impression was that we had before us an immense tumor of the spleen; but a careful study and subsequent

careful examination soon convinced us that it could be nothing but an ovarian tumor. At one time we thought we detected fluid above the tumor; but, on introducing the aspirator needle, we not only failed to get any fluid but found that the needle had entered a solid growth even two inches above the umbilicus.

Towards the end of the sixth week the child again became feverish and began to cough and finally died, seven weeks after the first appearance of the growth, with the symptoms of pulmonary edema. The post-mortem revealed an ovarian tumor of the right ovary measuring 27 inches in its longest circumference and $25\frac{1}{2}$ in the smaller, weighing 8 lbs. It was adherent to the peritoneum, the bowels and the bladder, but the adhesions were easily separated by the hand. The tumor could have been removed by operation without difficulty. Such an operation was suggested to the parents but we did not feel justified in urging it, in view of the probably malignant character of the growth.

The microscopic examination proved the tumor to be a sarcoma with scarcely a trace of normal structure left.

Quite a number of ovarian tumors in children have been observed; and I believe a successful ovariectomy on a child $3\frac{1}{2}$ years old is on record. All of these tumors were fibroids or fibro-cystic growths. In the literature accessible to me at present I find no record of a sarcoma of the ovary in one so young.

The tumor here described has been preserved and is in possession of the Scientific Association of German Physicians of this city before which it was exhibited.

GUNSHOT WOUND OF THE ABDOMEN PERFORATING THE INTESTINE.

BY J. F. BLACKBURN, M. D., OZARK, ARK.

[*Read Before the State Medical Society of Arkansas at the Ninth Annual Session, Little Rock, April 30th, May 1st and 2nd, 1884.*]

The following case while, presenting nothing new, does present features which are at least not common, and demonstrates in a very marked manner the great reparative powers of nature; hence I present it for the consideration of the society.

On the evening of April 2nd, 1884, I was called to see Mr. S., who had for some months retained illegal possession of a home-stead, being enabled to do so by the aid of a double-barrelled shotgun, with the use of which he appeared to be perfectly familiar, and also by a laudable indisposition on the part of the officials to inflict injury upon one laboring under a mental aberration, as this man's conduct undoubtedly indicated. At the time above mentioned, while the sheriff and posse were attempting to serve a writ of ejectment upon him, he opened fire upon them, and in order to insure their own safety they were forced to return it. In the general fusilade which followed Mr. S. received two wounds. The fight occurring six and a half miles in the country, it was about two and a half hours after the accident before I arrived.

I found a large, portly, healthy looking man, of a plethoric appearance, æt. 48 years, weight 210 pounds.

On examination I found that one ball from an improved, 38 calibre, Smith & Wesson pistol had entered four and a half inches to the right of the spinal column immediately above the eighth rib and, glancing around, emerged at a corresponding point in front, nine and a half inches to the right of the median line, making a distance traversed by the ball of about seven inches, its course, however, being superficial. The other, and by far the more serious wound, was from an improved 45 calibre Colt's army pistol, and entered five inches to the left of the spine on a level with the third lumbar vertebra, and passing straight through emerged about two inches to the left and one inch below the umbilicus.

I found him comparatively comfortable, complaining little of pain, having no hemorrhage of importance either external or internal, very little restlessness, and the pulse was neither weak nor irregular, but on the contrary was full and strong, the pulsations numbering 88 per minute. The only symptoms which could be taken as indicative of shock or internal hemorrhage were a slightly increased respiration and occasional sighing. This was not only the case when I arrived, but I was also informed by witnesses, in whose statements I placed implicit reliance, that there had not previous to my arrival been any pallor of the face or other evidences indicating severe shock. This, taken in connection with the fact that the patient had not partaken of food for several days previous to the accident, induced the belief that the intestines had not been

perforated, and their vacant condition served as a convenient explanation of their escape.

April 3d, 9 A. M. Found patient resting comparatively well, and was informed that he had rested very well during the night; pulse 90; temperature 100° F.; urinated naturally, urine contained no blood; bowels confined; dressed wounds and introduced drainage tubes. Patient vomited once while putting in tubes, the material vomited consisting principally of the food taken early in the morning previous to my arrival.

4 P. M. Still resting well, pulse 94; temperature 101°F.

April 4th, 9 A. M. Still resting well and appetite good, pulse 92; temperature 101°F.; still no action from the bowels.

April 5th, 9 A. M. Pulse 100; temperature 101°F.; appetite decreased somewhat but still sufficient food is taken; slight increase of pain and restlessness; bowels still confined.

April 6th, 9 A. M. Called Dr. H. H. Turner to see the case. On our arrival we were informed that during the preceding afternoon and night he had been quite restless, a gradual increase of restlessness having been noted until that time, when it was quite marked. Upon examination we discovered a small amount of stercoraeous matter escaping from the posterior abdominal opening, evidently from the descending colon judging from the location of the wound and the character of the discharge, still there was no tympanites or excessive tenderness of any portion of the abdomen. The pulse was 110; temperature 101½°F. Administered an enema with no result.

April 7th, 9 A. M. Pulse 108; temperature 101°F.; less restlessness and appetite improving; the fecal discharges from the wound have now become quite profuse. 4 P. M. Pulse and temperature unchanged; slight fluid action from bowels one half hour previous to visit—natural in every respect except in fluidity.

April 8th. Pulse 104; temperature 101°F.; appetite improving and restlessness still decreasing; fecal discharges from wound more profuse; small action from bowels in the natural way which contained no blood and was natural in consistence and other respects.

April 9th. Pulse 100; temperature 100°F.; appetite good and restlessness almost entirely disappeared; continued profuse fecal discharges from the wound; large natural action in the afternoon.

From this time a gradual but marked improvement was observable in all respects, the pulse and temperature gradually decreased until the normal standard was nearly reached, and the appetite improved; the stercoraceous discharges from the wound, however, continued in large quantities and there was a total absence of actions per vias naturales. On the 16th, at which time his temperature was about normal and pulse very slightly increased, he had a large healthy action in the natural way, which was followed by repetitions at natural periods, and accompanied by a corresponding decrease of the fecal discharge from the wound until they had entirely disappeared by April 24th. From this time the discharges from the wound became perfectly healthy and the convalescence of the patient has been extremely rapid. The points of special interest in this case are the absence of excessive shock which usually attends wounds of the intestines, the failure of the intestinal contents to become extravasated into the cavity of the peritoneum and thereby set up a severe if not fatal peritonitis, the length of time elapsing between the accident and the escape of the intestinal contents from the wound, the absence of blood in the discharge from the bowels, and the short length of time required by nature to close such a large fistulous opening.

The explanation of the absence of peritonitis is doubtless that the ball perforated the serous and muscular coats of the intestine only, and the contents could not escape until the mucous coat gave way from the pressure exerted from within or was perforated by the resulting ulcerative process, and that previous to this perforation the intestine became firmly united to the abdominal wall, the contents consequently escaping through the external wound instead of into the peritoneal cavity. This theory is also supported by the length of time elapsing (four days) between the accident and the escape of fecal matter through the wound.

It will be observed that nothing has been said of the treatment of this case, my object being to point out the peculiar features which it presents rather than to discourse on treatment. I will say, however, that the treatment was essentially conservative, amounting to little more than keeping the wounds cleansed and supporting the patient, a course which I consider far preferable to the various procedures which would have been adopted by heroic surgery.

FIRM UNION OF PREPUCE TO GLANS PENIS.

BY J. R. LEMEN, M. D., ST. LOUIS.

A. H., æt. 32, commercial traveller, when he first presented himself to me, was in fair health and able to attend to his business very well. He, however, complained of being quite nervous, which has always occasioned him some trouble. Patient when a child was always delicate and for this reason was kept in the house and not allowed to engage in boyhood's sports. He, himself, says that he was raised as a girlish boy, preferring to play with girls rather than with boys. He consulted me, February 15, about an inability to retract the prepuce. Upon examination of the penis I found that this was due to the fact that the prepuce was firmly united to the glans penis as far forwards on right side as to within two lines of the meatus and probably three lines of meatus on left side—leaving but one-fourth of glans free. The glans was poorly developed, and when erect the penis was deflected to right side. When he attempted to have intercourse the entrance could not be made before emission would take place. I found upon inquiring that the patient had never been able to retract the foreskin to a greater extent than at the present time. He has worried about the condition since he learned that it was not normal. His appearance before the operation indicated that he was intensely worried; and, although he is naturally a nervous fellow, this condition has in all probability increased it. I recommended circumcision, first advising him to allow me to loosen the foreskin from glans. He readily consented and expressed himself as willing to undergo any operation that would cure him. I placed patient on a table and attempted to force the foreskin back, but found it so firmly united that I was compelled to dissect the foreskin loose from the glans penis—as far back as the corona glandis. I retracted it and dressed it with iodoform and lint daily. It healed kindly in a few days, and, when well I found that about three-fourths of the glans penis was free. I advised him to allow me to circumcise this time, and he again consented. I dissected up the small portion of the prepuce that still adhered to the glans and then circumcised him, cutting off probably half an inch of foreskin, attached the mucous membrane to remaining rim of prepuce and retracted fully and dressed with iodoform and lint. It again

healed very kindly, and when well I found that he had an almost perfectly formed penis, which had developed considerably.

I think that the adherent foreskin was the cause of the nervous condition of the patient, as he is not so excitable now as before the operation; though two months only have elapsed. If so great an improvement takes place in so short a time, I think I am justified in expecting still greater improvement.

PRESERVATION OF BODIES FOR DISSECTION.—O. T. Freer writes from Munich that in the anatomical department of the University there the material used for dissection seems to keep fresh much longer than he has found to be the case in the medical colleges of this country. He learned from Prof. Rudinger that the injecting fluid used in the preparation of the bodies there is a mixture of carbolic acid, glycerine and alcohol, and this method has been in use since 1882. Subjects injected with this mixture will keep fresh from two to six months, according to the quantity of injection used. For preserving bodies three to six months, the solution is composed of glycerine, 40 parts; carbolic acid, crystalized, 11; alcohol, 8. For preserving them two to three months, glycerine, 80 parts; carbolic acid, 17; alcohol, 13. The injection is made into the femoral artery and the amount used is two to four litres, or quarts, though an ordinary subject will readily contain fifty per cent. more than the larger quantity.—*Chic. Med. Jour. and Ex.* July, '84.

THE S. D. GROSS PROFESSORSHIP OF PATHOLOGICAL ANATOMY.—The Alumni Association of Jefferson Medical College have inaugurated a movement to secure the endowment of a professorship of pathological anatomy as a suitable memorial of the eminent surgeon and teacher of surgery, Dr. S. D. Gross, whose name the professorship will bear. It is a graceful tribute to the value of his services and to his great ability, and doubtless all the alumni of Jefferson Medical College will take pleasure in testifying their respect for Dr. Gross and their interest in the college by contributing as they may be able.

We are informed that Dr. N. B. Carson, 1010 Olive St., has been designated to receive such sums as may be given by alumni of Jefferson College or others in this part of the country.

EDITORIAL.

THE CHOLERA IN FRANCE.

Europe has been put in great anxiety by the appearance of epidemic cholera in the French seaport, Toulon, followed by its invasion of Marseilles, and its appearance later in Paris. During the twenty-four hours of July 12, fifty-seven deaths occurred from cholera in Marseilles, thirty-six at Toulon. Italy has already declared strict quarantine against all incomers from France and Switzerland, and the whole continent is apprehensive of a widespread epidemic. The first fatal case occurred in Toulon port, June 14th; then another on the 19th, after which deaths were frequent, and as above stated, number thirty-six for July 12. During the last half of the month the pestilence continued with great severity, diminishing somewhat in intensity; at the last reports it had extended into some of the smaller towns, thus making up in extent what it had lost in virulence. Toulon was ravaged during the last epidemic of cholera, but the warning was neglected, and the city still exhibits a state of filthiness scarcely to be credited. In the old part of the city there are not even privies, the filth of dwellings being disposed of in the good old way, being thrown into the public streets and thence washed, when it rains, into the port. Yet Toulon is one of the most important of the French naval stations, the port harboring constantly a large fleet, and the garrison numbers 25,000 men.

The authorities kept the matter quiet until concealment could no longer be maintained, when thousands of the population fled in a panic to spread the plague far and wide.

The bad sanitary condition of many if not most of the old cities of Europe is proverbial. "See Naples and die," is capable of a very grim interpretation. Our Nineteenth century sanitation cries out against them, and many travellers used to pure water and to drain-

age fall victims to the insidious fevers that lurk in the shadows of the ruins of antiquity. The complaints of visitors are sometimes queerly met. An American in Florence, recommending the establishment of a good system of drainage for that much sought city to an official of high authority, was reminded that the civilization of Italy was of older date than that of his own country and needed none of his suggestions. It has been wisely said that the site of cities should be periodically burned over. In these days the burnings are too infrequent. Toulon being a city of such note is visited by many strangers; it is stated that among these in times past there have been numerous fatal cases of typhoid. The garri-son has been so seriously the sufferer that the fresh and young conscripts are no longer confined in the city barracks, but are distributed outside the fatal limits.

We have, then, in Toulon, a hot-bed of disease in its worst form maintained by a great nation, in the very face of knowledge and open protest. Toulon may be classed in that respect with Havana, Vera Cruz, Rio Janeiro, all public nuisances of the most evil character, and chargeable with the production or introduction of most devastating pestilences.

When our civilization is sufficiently advanced, among the most important subjects for international legislation and execution will be the existence of such plague centers and their abolition as such.

RELIEF OF FALSE ANCHYLOSIS OF THE FLEXED KNEE.

In a well written report of a case of false ankylosis of the knee, flexed at an acute angle, Dr. Block, in the *Kansas City Medical Record*, tells of a young man on whom, immediately after tenotomy of the hamstring tendons, *brisement forcé* was employed and "decided pressure was brought to bear on the anterior joint surface, the leg being steadied upon the table," that is to say, rather pow-

erful *extension* of the joint was made ; rupture of the popliteal artery occurred, the vessel was promptly tied, but the patient died on the twelfth day, erysipelas, secondary hemorrhage and other complications having supervened upon the operation.

The author suggests that but little reference is made to such an accident in literature. He advises in like cases of arterial rupture, amputation in preference to ligation. He says, it is a wonder that the accident is not more frequently met with; it occurs in attempted reduction of old luxations; why not in this somewhat analogous condition ?

Dr. Block has our sympathy in the unfortunate outcome of his operation ; but unforeseen accidents happen to the best of us. When fatal results follow operations of convenience the regret seems greater than when succeeding operations of necessity. The former are not absolutely demanded, but being decided upon the surgeon can deliberately attend to the preliminary details and carefully map out his course. And yet all accidents cannot be foreseen nor all complications avoided. Still we will not be deterred, but continue in our efforts to afford relief until our art has in its results attained to the positive.

This accident of arterial rupture following *brisement forcé* has occurred in the experience of other surgeons, but they have not had the fortitude to make report of their mishaps. Dr. Block is greatly to be commended in this particular. We doubtless learn as much from our misfortunes as from our successes. We have access to authors who say they have known both vessels and nerves to have been ruptured, and yet we cannot place our hands on the reported cases.

We could wish Dr. Block had dwelt upon the best method of avoiding such accidents in like cases. If a case were to present itself to-morrow would he again adopt a like procedure ? We wot not. The arterial lesion occurred during the *extreme* and sudden *extension* ; and just here, if at all, was the error. In our own experience we have known, through the employment of such exten-

sion, bones to be fractured in some cases, and so great lesion of the soft parts inflicted that tetanus supervened, death following in other cases.

We have learned the lesson to resort to extreme *flexion* for breaking up the adhesions; that accomplished, then gradual extension until the desired position is had.

We would outline the therapy of false ankylosis as follows:—anesthesia; tenotomy; rupture of adhesions by *flexing* the limb—moderate force only being required; joint splinted so long as tenderness exists; gradual extension; passive motion.

More may be required than division of the tendons; if tense cicatrices and fasciæ exist, they should be cut subcutaneously. After this it is not always best to at once proceed with the forcible movements of the joint, for the external puncture may be converted into a gaping wound, and the subcutaneous tissue may be lacerated, followed by infiltration and abscess. It is better to wait a few days until the punctures have healed, then break up the adhesions under anesthesia by *flexion*, and in the great majority of instances the power of the hand alone, the thigh being firmly fixed, is sufficient, a quick sudden motion being best. The resulting inflammation of the joint is to be combated by the temporary application of a splint retaining the joint in its previous position. Tenderness having disappeared, extension and passive motions, under anesthesia if necessary, should be resorted to, the latter with the hope of restoring motion to the joint, but if that is despaired of or not wished then the former alone—extension—gradually made until the desired position is attained. No harm can result from the employment of such measures; vessels and nerves that have shortened up and accommodated themselves to the malposition will thus be gradually stretched and disengaged.

While in many cases motion can be restored to an ankylosed joint, yet we are not sanguine that it will remain permanent; experience shows that it stiffens up in time.

That arterial rupture has frequently occurred in attempted re-

duction of old dislocations—especially of the shoulder joint—is not surprising, for the misplaced bone may be in contact with and may have formed adhesions to the vessel. But in ankylosis there is not such a changed relation of the contiguous bones; such contact and adhesion of artery and bone would be rarely, if ever, present.

In one case in our efforts to break up the adhesions of an ankylosed shoulder we had no fear for the artery; it bore the same relation to the joint as before the humerus and scapula were fixed.

A shortened and adherent artery in an old, acutely flexed ankylosis would make us deprecate sudden and extreme extension.

VACCINO-SYPHILIS.

Allusion has been made to the experiments of Dr. Cory, one of the official vaccinators in England, in order to determine positively the truth in regard to the much debated question whether it is possible to communicate syphilis with vaccine lymph when due care has been taken to secure that there shall be no admixture of syphilitic blood with the lymph. In the fourth experiment Dr. Cory was successful in inoculating himself, and therefore has had to undergo in the interest of science all the suffering attendant upon syphilitic infection. This result has convinced Drs. Bristowe, Humphrey and Ballard and Mr. Hutchinson, who were appointed a committee to investigate the case, that “it is possible for syphilis to be communicated in vaccination from a vaccine vesicle on a syphilitic person, notwithstanding that the operation be performed with the utmost care to avoid the admixture of blood.” While this conclusion is in direct opposition to the teaching of all the prominent English authorities on the subject, it is by no means a very strong argument in favor of the ground maintained by the anti-vaccinationists; for the infants from which Dr. Cory obtained the lymph with which he inoculated himself were all the subjects of active manifestations of syphilis, patients from whom scarcely the most careless vaccinator would think of taking lymph, unless, as Dr. Cory did, for the express purpose of testing the possibility of transmitting the poison in this

way. While the result which has brought so much suffering to the experimenter proves that syphilis, when present in a active form, can be transmitted with vaccine lymph, there does not yet seem to be any conclusive evidence that the syphilitic virus can be so transmitted in cases where the syphilis is not present by active manifestations.

WHOLE WHEAT OR WHITE FLOUR.

Prompted by the fact that in most civilized countries even the poorest inhabitants choose to eat bread made from the finer grades of flour in spite of the loss in weight of the grain, Drs. N. A. Randolph and A. E. Roussel, have undertaken a careful study of the nutritive value of branny foods. Their experiments were made in the Biological Laboratory of the University of Pennsylvania; and the results of these experiments were embodied in a paper which was presented to the College of Physicians of Philadelphia.

In this paper the authors review the observations made by other physiologists, among other facts noting the fallacy of attempting to estimate the nutritive value of cereal foods by microscopic examination and determination of the proportion of "gluten cells" present.

From their study and experiments they reach the following conclusions:

1. The carbo-hydrates of bran are digested by man to but a slight degree.
2. The nutritive salts of the wheat grain are contained chiefly in the bran, and, therefore, when bread is eaten to the exclusion of other food, the kinds of bread which contains these elements are the more valuable. When, however, as is usually the case, bread is used as an adjunct to other foods which contain the inorganic nutritive elements, a white bread offers, weight for weight, more available food than does one containing bran.
3. By far the major portion of the gluten of wheat exists in the central four-fifths of the grain, entirely independent of the cells of

the fourth bran layer (the so-called "gluten cells"). Further, the cells last named, even when thoroughly cooked, are little, if at all, affected by passage through the digestive tract of the healthy adult.

4. In an ordinary mixed diet the retention of bran in flour is a false economy, as its presence so quickens peristaltic action as to prevent the complete digestion and absorption, not only of the proteids present in the branny food, but also of other food-stuffs ingested at the same time.

5. Inasmuch as in the bran of wheat, as ordinarily roughly removed, there is adherent a noteworthy amount of the true gluten of the endosperm, any process which in the production of wheaten flour should remove simply the three cortical layers of the grain would yield a flour at once cheaper and more nutritious than that ordinarily used."

CHOLERA.

Prof. Koch believes that he has demonstrated the existence of specific microbia in the dejecta of cholera patients, and in the intestines of those who have died from this disease. He believes that these microbia are the essential cause of the disease. In this respect his conclusions are doubted or denied by a good many scientific observers. We think that as yet the verdict must be "not proven."

Yet in the face of the fact that cholera is prevailing in epidemic form in France, what is it incumbent upon sanitarians and health authorities to do in this country? Certainly it behooves all those in authority to secure the best possible sanitary conditions, to clean up streets, alleys, yards and privies, to prevent the accumulation of putrefying or putrescible matter and to make free and judicious use of disinfectants, the most valuable of which, as has been abundantly proven, are those which contain free chlorine or the various chlorides.

In case cholera should break out in any of our American cities,

it should be remembered that, wherever applicable, dry heat has been found to be the most efficient disinfectant, and all articles of clothing or bedding that may be at all soiled by any of the excretions of a cholera patient should be either burned or subjected to a high temperature until thoroughly dried out. Dr. Koch explains this fact on the theory that the dry heat kills the microbia; and it certainly is a strong argument in favor of the bacterial nature of the disease, whether or not he has succeeded in isolating and demonstrating the particular bacteria that cause it.

NUMBNESS OF UPPER EXTREMITIES.

In a paper read before the College of Physicians of Philadelphia, Dr. Wharton Sinkler calls attention to a form of numbness, especially of the upper extremities, occurring usually in women at about the change of life, though he has found the same condition occasionally in men.

The numbness generally begins in one or both hands and gradually extends up the arms. It is almost always worst in the morning before the patient rises. It is described as a "tingling," or as a sensation "like pins and needles" or as if the limb "were asleep."

There is generally a transient weakness, but no paralysis, often pain and sometimes a sensation as if the numb part were swollen.

Dr. Sinkler thinks that there is probably a hyperemia of the nerve trunk or of a part of the cord, and he notes the fact that the recumbent position at night seems to increase the numbness as a confirmation of this view, as the supine position favors an increase of blood in the cord and nerves of the extremities.

As to treatment he has derived the most satisfaction from the administration of ergot. Massage and galvanism have been valuable adjuvants, and bromide of potassium was helpful in some cases. He found the use of strychnia for a time after the disappearance of the numbness to be of great advantage.

BOOK REVIEWS AND NOTICES.

SHAKESPEARE AS A PHYSICIAN. BY J. PORTMAN CHESNEY, M. D.,
(*St. Louis, Chicago and Atlanta: J. H. Chambers & Co.,*) 1884. 8vo.; pp.
226; cloth.

Dr. Chesney is evidently a close student of Shakespeare and has displayed a deal of careful research and ingenious attention in the preparation of this volume. He claims to have brought together here "every word which in any way relates to medicine, surgery or obstetrics found in the complete works of that author." This he has well done.

In his "criticisms" the author has occasionally allowed himself to fall into a looseness of style that does not compare favorably with the text of his quotations.

It is certainly within the bounds of truth to say that "the click of the fetal heart, * * *, is of some value" as a sign of pregnancy.

That some of Dr. Chesney's comments are more keen than correct may be seen in this. On page 75, he says: "We are aware, no doubt, of the very powerful effects mental conditions have over the power of generation. Who, for example, ever knew conception to follow a rape?" Referring to Taylor's Principles and Practice of Medical Jurisprudence, Vol. II, pp. 449, 450, we find the following: "It was formerly a debated question, whether, in a case of rape, pregnancy could possibly follow: * * * This question scarcely requires discussion. Such a defence would not be admitted as an answer to a charge of rape, or to show under any circumstances that intercourse had been voluntary on the part of a woman. Conception, it is well-known, does not depend upon the consciousness or volition of a female." Tidy's Legal Medicine, Vol. II, p. 212, gives the following: "Impregnation is independent of volition on the part of those having connection. The fact that pregnancy may follow rape is beyond all question."

There are a number of passages opposite to which the thoughtful

reader will be disposed to place in the margin marks of interrogation or exclamation; and the author takes occasion to advance personal opinions of a materialistic nature which seem out of taste in a work of this character. Yet there is much of interest in the volume, and it will probably be so received as to speedily require a second edition in which we shall hope to see some changes by the author and some corrections of errors that are doubtless due to a lack of care in reading proof.

MEDICAL SOCIETY OF THE STATE OF TENNESSEE:—TRANSACTIONS. 1884. 8vo.; pp. 140; paper.

This volume of transactions is neatly printed and some of the papers give evidence of care in their preparation. One quarter of the volume is occupied with the constitution, by-laws and code of ethics.

MINUTES OF THE STATE MEDICAL SOCIETY OF ARKANSAS at its Ninth Annual Session. 8vo.; pp. 55; paper.

The State Medical Society of Arkansas has adopted the plan of publishing only the minutes of their annual meeting together with the annual address of the president.

The pamphlet containing the minutes and address is very handsomely printed upon heavy paper. The address of the president, Dr. J. M. Keller, of Hot Springs, is able and interesting. In it he discusses several points of considerable interest to surgeons, referring specially to the disuse of the probe in wounds of the trunk, and giving at some length the result of personal observation with reference to the value of alcohol as an anesthetic, giving to Dr. Link, of Indiana, the credit for first calling the attention of the profession to this subject. He also called attention to the matter of excision of the primary lesion of syphilis, which he decidedly favors. Another important matter presented by the president is the subject of cremation. Dr. Keller is an ardent and able advocate of this method of disposal of the dead, which is destined to become the usual method, if not in all places, certainly in our great cities. Dr. Keller's advocacy of it in the state and national associations will be an important factor in bringing about that result.

We shall have the pleasure of presenting to our readers a number of able papers which were read at this meeting and which have been placed in our hands by vote of the society.

A TREATISE ON OPHTHALMOLOGY for the General Practitioner. Illustrated. BY ADOLF ALT, M. D., 8vo.; pp. 224, cloth. *St. Louis: J. H. Chambers & Co.* 1884.

This is a very valuable contribution to ophthalmic literature. It is concise and accurate, and contains eighty-two illustrations, many of which contain chapters in themselves. One of the marked features of the work is the detailed description of the anatomy of the eye, and the chapter on this subject alone would entitle it to a place in every complete medical library.

Another feature is the cuts showing the results of the diseases and accidents which the author is describing. These are of additional interest and are additionally instructive, when we recollect that many of them are made from enlarged drawings of specimens, and not from the imagination. The diagrams perhaps teach as much as the text, and of themselves give the book a decided value. The advice in regard to treatment is sound and reliable.

We would recommend the book to the general practitioner, on account of its compactness, clearness and the wisdom of its suggestions, and to those who wish to thoroughly understand the diseases of the eye as a very important assistance. M. H. P.

A TREATISE ON INSANITY in its Medical Relations. BY WILLIAM A. HAMMOND, M. D. *New York: D. Appleton & Co.;* 1883. 8vo.; pp. 767; (*St. Louis: J. H. Chambers & Co.*)

Any book from Dr. Hammond's pen will command interest and will be largely read, and we can certainly predict that for the above. It may be considered a hazardous undertaking for any one who has never been intimately connected with an insane asylum to write a book on insanity, but the author's keen observation, large experience and rational views enabled him to write a valuable book. His experience naturally is greatest with mild forms and beginning stages of insanity, and that may have induced him to make a rather comprehensive definition of insanity according to which the majority of persons would, at times, have to be considered insane. His definition is: "A manifestation of disease of the brain, characterized by a general or partial derangement of one or more faculties of the mind, and in which, while consciousness is not abolished, mental freedom is weakened, perverted, or destroyed." Most every one may recall instances of "partial de-

rangement of one or more faculties of the mind" in himself, or instances in which, "while consciousness is not abolished mental freedom is weakened." However, it is optional where the line between sanity and insanity is drawn, and Dr. Hammond emphatically states that medical and legal insanity are two entirely different things.

A large part of the book is taken up by General Principles, Instinct and Sleep, part of which was published in various journals by the same author. The section on insanity is exceedingly fascinating, even sensational. The author displays a tendency to use new words and terms, forgetting sometimes to add a definition. What is the meaning of "titulating," "demonolators?" Dr. Hammond judges very harshly of our average lunatic asylums whose medical officers, he says, may any moment be ousted by some medical adventurer who has rendered political services to the "party." The doctor thinks no case having a home, friends able and willing to take care of it and the required medical attendance should be committed to a public insane asylum. The author is very fond of the bromides in cases of alienation supposed to be due to hyperemia of the brain.

Ignoring a few shortcomings in the work no one will regret having read Dr. Hammond's latest production. The print and binding are executed in the usual good style of the publisher. H. W. H.

A PRACTICAL TREATISE ON SURGICAL DIAGNOSIS designed as a manual for Practitioners and Students in medicine. By AMBROSE L. RANNEY, A. M., M. D., etc. Third Edition.—Thoroughly revised, enlarged and profusely illustrated. *New York: Wm. Wood & Company.* 1884. 8vo.; pp. 608; cloth. (St. Louis Stationery and Book Company. J. H. Chambers & Co.)

The successive editions of this work of Dr. Ranney enhance its value as its size increases.

In this third edition, two new chapters are added treating of diseases of the brain and spinal cord and their envelopes; and the whole work has been thoroughly revised and illustrated.

It is a valuable work for the student or practitioner.

BOOKS AND PAMPHLETS RECEIVED.

The Extra-Professional Work of Physicians. By Dan Millikin, M. D., Hamilton, O.—Third Annual Announcement of the Hospital Medical

College of Evansville, Ind. Session of 1884-'85.—Students' Manual of Electro-Therapeutics. By R. W. Amidon, A. M., M. D. New York: G. P. Putnam's Sons, 12mo., pp. 93, cloth. \$1.00. (St. Louis Stationery and Book Co.)—Announcement of the Twenty-fifth Annual Course of Instruction at the Miami Medical College of Cincinnati for 1884-'85, with complete list of its Alumni.—Sixth Annual Announcement and Catalogue of the Medical Department of the Arkansas Industrial University for Session of 1884-'85.—Criminal Responsibility of the Insane. By Orpheus Everts, M. D., College Hill, O., (Reprint from American Journal of Insanity).—Trachoma and the Etiology of Jequirity Ophthalmia. By J. A. Andrews, M. D. (Reprint from the Archives of Medicine).—Second Annual Report of the Provisional Board of Health of Ontario, for 1883. Toronto, Can.: Blackett Robinson. 8vo; pp. 480; paper.—Auscultation, Percussion and Urinalysis. Edited by C. Henri Leonard, A. M., M. D. Fully Illustrated. Detroit: Illustrated Medical Journal Co. 12 mo.: pp. 160; cloth \$1.00.—Henry C. Lea's Son & Co., Classified Catalogue of Medical and Surgical Publications.—Contributions to the Anatomy and Pathology of the Nervous System—Nodular Tumor of the Corpus Callosum. By Francis A. McGuire, M. D., New York. (Reprint from Amer. Jour. Neurol. and Psychology).—Infant Foods. By Prof. Albert R. Leeds, Ph. D. (Reprint from the Medical News).—Minutes of the Medical Society of Arkansas, at Its Ninth Annual Session.—Health Hints for Travellers. By John C. Sundborg, M. D. Philadelphia: D. G. Brinton, 12mo.; pp. 61, cloth. (St. Louis: J. H. Chambers & Co.)—Medical German. By Solomon Deutsch, A. M., Ph. D. New York: J. H. Vail & Co., 12mo.; pp. 336; cloth, \$2.25. (St. Louis: J. H. Chambers & Co.)—Sixth Annual Announcement Fort Wayne College of Medicine, 1884-'85.—Ontario Medical Association, Fourth Annual Meeting, 1884.—Address on Practical Medicine. By John V. Shoemaker, A. M., M. D., Philadelphia.—Transactions of the Medical Society of the State of Tennessee, 1884. Nashville American Steam Book and Job Printing Co.—Quarantine and Sanitary Operations of the Board of Health of the State of Louisiana, 1880-'83. By Joseph Jones, M. D. Baton Rouge: Leon Jastremski, 8vo; pp. 393; paper. Zweiter Jahresbericht des Deutschen Samariter Vereins zu Kiel, 1883.

THE CHICAGO MEDICAL JOURNAL AND EXAMINER.—This old, reliable and ably conducted journal has adopted a new cover and title page with the July number, which is the first of Volume XLIX. New type, tinted paper and the new cover make a decided improvement in what has been one of our best Western exchanges. We congratulate our colleagues on the improvement.

REPORTS ON PROGRESS.

SURGERY.

Localization of Perinephric Lesions.—DR. JNO. B. ROBERTS in his paper before the Am. Surgical Association urged upon the fellows the importance of careful study of every case of perinephric disease. He compared the results to be derived from such a study with those already attained by the study of cerebral disease in localizing cerebral lesions, which has become a matter of so much interest and importance to physicians and surgeons of late years.

The symptoms and signs which must guide us in fixing the exact site of the lesion are those due to extension of inflammation to adjacent structures and those caused by increase of bulk at the seat of the disease. These may be called the localizing symptoms as distinguished from the inherent symptoms of the disease itself.

He gives the following table of symptoms of probable and possible value in localizing perinephritis and perinephric lesions:

All anterior regions.—Pain, tenderness, swelling, edema, pointing, etc., in front and side of abdomen.

All posterior regions.—Pain, tenderness, swelling, edema, pointing etc., in loin.

Upper tracts.—Pleuritic friction, pleural effusion, empyema, expectoration of pus, dyspnea, suprarenal involvement, solar plexus involvement. If on right side bilateral edema of legs, jaundice, fatty stools; persistent vomiting; rapid emaciation; ascites.

Middle tracts.—Albuminuria and casts; suprapubic, scrotal or vulvar pain or anesthesia; suppression of urine; uremia; pus in the urine; edema of scrotum or varicocele (especially on left side.)

Lower tracts.—Flexion of hip; pain or anesthesia of front, inside, or outside of thigh; retraction of testicle; pain at knee; scrotal or vulvar pain or anesthesia, without accompanying albuminuria; unilateral edema of legs; abscess or sinus near Poupert's ligament; constipation (if left side); involvement of chyle receptacle (if right side).

Gastrostomy.—MR. KNOWSLEY THORNTON performed this operation, May 6, upon a girl eight years old, who for some years had made a practice of eating the combings of her hair, bits of cotton, etc., until a large mass had gradually accumulated, measuring nine and a half inches long by five inches broad at the cardiac end, the mass being moulded to the form of the stomach. An incision five inches long was made in the anterior wall of the stomach and the mass was withdrawn. There was little hemorrhage, and care was taken that neither the wound nor the peritoneum should be soiled by any of the contents of the stomach. Five silk sutures were employed to close the wound.—*Brit. Med. Jour.*, May 10, 1884.

Nitric Acid Burns.—A. IRVING recommends the application of a dilute solution of sulphurous acid in cases of burns from nitric acid. He has found that the effect is immediate and the relief complete, and the healing of the wound was prompt.—*Chem. News.*

Extraordinary Calculus.—DR. ALEX PATTERSON related to the Glasgow Pathological Society a remarkable case of calculus. The subject was a man who at the age of 17 fell down the well of a hoist, alighting with his legs astride an iron bar, sustaining a double fracture of the left leg, rupturing the urethra, and lacerating the perineum. Two ineffectual attempts at closure of the perineal fistulas were made and the urine continued to dribble incessantly. The patient was much averse to any operative procedure, although in 1852 he became aware of the presence of a calculus. In July, 1872, Dr. G. W. was called to see him. The sinus was considerably enlarged, and on introducing his finger the doctor at once felt the calculus in which there was an irregular cavity. The patient explained this by saying that he had introduced a chisel and attempted to break up the mass, and had so removed about an ounce. While the doctor was gone for a pair of forceps, the patient walked about the room suffering intense pain, when suddenly the stone burst through the perineum and fell upon the floor, breaking into two pieces. The weight of the stone as expelled was fourteen and a half ounces, which, with the ounce of fragments, makes the total weight $15\frac{1}{2}$ ounces. In its long circumference the stone measured $10\frac{3}{8}$ inches and in its short circumference $8\frac{1}{8}$ inches. The lacerated perineum was dressed with carbolic oil and in six days the patient was going about as usual. He died of apoplexy eleven years after the passage of the stone.—*Glasgow Med. Jour.* June, 1884.

Value of Styptics.—DR. JNO. B. ROBERTS says: The belief in the necessity of styptics is a delusion less dangerous than that just mentioned, but is given more extended credence. Such agents are seldom, probably never needed in general surgery to arrest hemorrhages. When ligatures, torsion or acupressure is not demanded, and such is seldom the case unless the artery is as large as the facial, moderate direct pressure applied in dressing the wound is the only hemostatic required. Styptics often do harm and, as they are not needed, they should be discarded.—*Address before Pa. State Med. Soc.*

Treatment of Burns—ROBERT. T. MORRIS outlines the following method of treating different grades of burns. In burns of the first degree, in which the skin is hyperemic but is not destroyed at all, the stinging, burning pain calls for relief, which he thinks is best given by applying upon strips of any soft fabric a mixture of equal parts of vaseline and carbonate of lead, covering the whole with a piece of guttapercha tissue or oil silk. In burns of the second degree, where the cuticle is destroyed, he advises antiseptic applications varying with the extent of surface involved. If this be small he would, after anesthetizing the patient, remove all the cuticle which is loose or which has been raised in vesicles and blebs. Then he would lay the affected part, as an arm, hand, or foot, leg, etc, on a towel which has been wrung out in a solution of bichloride of mercury (1 to 2,000) and carry underneath all a rubber blanket so disposed as to convey into a pail or jar the fluid used for irrigating. Then carefully scrub with a soft brush all the burned surface and the adjoining surface, using either the bichloride of mercury solution already mentioned or a solution of salicylic acid and boracic acid in proportion of one grain of the former and six of the latter to each ounce of water. Then he covers the burned surface with narrow strips of oil silk protective which has been kept in an antiseptic solution, and sprinkles iodoform along the margin of the strips of protective. Several layers of carbolized or sublimated gauze are then applied with a thick layer of antiseptic gauze and a carbolized roller bandage is snugly applied outside of all. The dressing is kept undisturbed until the eighth day, and when it is removed the part is found healed and no further treatment needed. The bowels must be kept open and constitutional disturbance is quieted with bromide of potassium and chloral hydrate. Where a large surface is involved,

it is often impossible to adopt a thorough antiseptic dressing, as above, and he then recommends the adoption of the subnitrate of bismuth treatment. Having anesthetized the patient and removed the clothing and whatever adheres to the surface, he washes the whole injured area with an antiseptic solution. All loose cuticle is removed and the surface underneath is immediately sprinkled thickly with subnitrate of bismuth, and covered over with a single layer of soft cloth or lint. This cloth is removed once or twice daily and fresh bismuth applied wherever the coating has been loosened by the discharge. Morphine is administered hypodermically during the period of depression and congestion, to sustain the heat and relieve the shock to the nervous system, and during the inflammatory stage digitalis is administered to support the heart and assist the kidneys. He gives belladonna to quiet the stomach and acid drinks to allay thirst. Peptonized milk by enema is given for nourishment. During the period of reaction he continues the rectal alimentation and then for the first time causes a free movement of the bowels by a saline cathartic. When reaction is well established, he stimulates with sherry wine and gradually coaxes the stomach to bear a light varied diet.

Where the burn is of the third degree, in which the skin is destroyed through a part of its thickness, he recommends in cases where the surface involved includes only a few inches a rigid antiseptic dressing like that already described for burns of the second degree except that the dressing must be left undisturbed for a longer time, say three weeks. If at the end of that time "the slough has not been absorbed, pull it away and irrigate the granulating surface with an antiseptic fluid" He advises the hastening of the reparative process by a plastic operation or skin grafting. In more extensive burns he uses the antiseptic dressing at first, but after about twelve days in these cases the discharge almost always, becomes offensive, and he then removes this under antiseptic irrigation and sprinkles on subnitrate of bismuth. When sloughs are adherent he rubs in iodoform with the bismuth. As the sloughs separate they should be trimmed with scissors and bismuth be sprinkled on wherever any raw surface is exposed. Burns of the fourth degree, where the whole thickness of the skin is destroyed, are best treated in Dr. Morris's opinion by the dry treatment from the first, viz., covering with soft cloth or lint and keeping the sloughs trimmed off as fast as separated.— *N. Y. Med. Record*, May 11, 1884.

Fracture of Tibia from Indirect Violence.—W. M. YOUNG relates the case of an insane patient in an asylum, who in a tussle with one of the other patients, made a spring in order to free himself from his antagonist, when his left leg suddenly gave way and he fell into the arms of one of the attendants who was hastening to separate the two men. On examination it was found that he had received a very severe compound oblique fracture of the tibia, at the junction of the middle and lower thirds: probably the fibula was also fractured. The upper fragment was protruded with so much force as to penetrate the cloth of his pantaloons. The wound was so much lacerated that at first it seemed impossible to save the limb; but as the condition of the patient was such as to make it seem likely that he would not survive the shock of an amputation, it was determined to make an attempt to save the leg. Accordingly a portion of the upper fragment was taken off so as to permit of reducing the displacement; the limb was set in plaster splints, and the wound was dressed with tincture of benzoin and carbolic acid. In spite of the fact that the patient was very refractory and could not be prevented from kicking around a good deal, a very excellent recovery was made with no noticeable deformity, and only a little shortening.—*Brit. Med. Jour.* May 24, 1884.

Abdominal Wound from a Pitchfork.—JOHN MOLOXY reports that he was called to see a man who in sliding from a haystack on his back was transfixcd by a pitchfork that was standing against the stack. One of the prongs had broken short off and remained in his body. The man was found sitting sideways on a chair, his legs were drawn up with his feet resting on a stool and his left arm resting in his lap. He was suffering intensely; his face was bathed with perspiration; he had been vomiting and hiccoughing. There was a punctured wound with a gaping and jagged orifice about three and a half inches from the spine, just over the crest of the ilium. About three inches above the wound there was a hard substance beneath the skin and muscles which, on the lightest pressure caused severe pain in the epigastrium. A probe passed into the wound ran forward and upward but did not touch the prong. Having administered a full dose of morphine, the doctor cut down upon the end of the prong at a point one inch and a half below the last rib on the left side, and failing to grasp it securely with a pair of polypus forceps, which was the only instrument of the sort which was at hand, he enlarged

the wound, and having seized the prong with his thumb and finger, drew it out with some difficulty. It measured twelve inches in length, and lay in the cavity with its concavity forward, right across the epigastrium. There was little external hemorrhage, but he vomited a good deal of blood. He seemed to be sinking rapidly but the application of mustard to the region of the heart and heat to the feet caused him to rally after about an hour, when the wounds were dressed with pads soaked in compound tincture of benzoin, and twenty drops of Battley's sedative solution were administered. He still complained of pain in the epigastrium, but the vomiting ceased very soon after he lay down. The treatment afterwards consisted of opiates to control pain, poultices to the wounds, absolute rest, and the limitation of the ingesta to quantities not exceeding a teaspoonful at a time. Pain in the epigastrium and vomiting continued for a few days, but by the twelfth day all inflammatory symptoms had disappeared, and on the twentieth day he sat up and the wounds were nicely healed.—*Brit. Med. Jour.*, May 24.

GENERAL MEDICINE AND THERAPEUTICS.

Pomegranate Root Bark.—CHARLES FORBES states as the result of several comparative tests that the fluid extract of pomegranate root bark is much more efficient for the removal of *tenia solium* than filix mas, kousso, turpentine or any other of the much used *teniacides*.

He finds the most satisfactory results from administering first a full dose of castor oil in the morning and then following it with ounce doses of the fluid extract at intervals of one hour. The first dose is frequently rejected, but the subsequent doses are retained and act efficiently.

The worm is usually expelled within an hour after the first dose that is retained, and one more dose is given to provide for the contingency of the presence of a second worm. The worm is not killed, but seems to be intoxicated by the drug.—*Glasgow Medical Journal*, July, 1884.

Caffein Citrate.—DR. H. G. LEFFMAN in a recent paper before the Philadelphia College of Physicians says:

There is no caffein citrate in the market, and it is doubtful whether any such a salt can be prepared. The commercial prepa-

rations are either pure caffein or variable mixtures of it with citric acid.

The manufacturers in this city each furnishes a different article, except in cases in which they buy from a common source; and a house in a neighboring city furnishes an article which contains no citric acid. Some of the samples are purely bitter in taste, while others are distinctly sour. Analyses of some of the commercial salts are recorded in a paper read before the last meeting of the American Pharmaceutical Association by Dr. G. C. Wheeler. He found the quantities of caffein varied from 96.5 per cent. to 63.5 per cent.; of citric acid from 36.5 per cent. to 3.5 per cent.; none of these figures correspond with the proportion of a true citrate.

It seems to me that accurate clinical observation cannot be made with a preparation of so uncertain a character; for, as seen by these figures, the proportion of active ingredient may vary 33 per cent., and the lesson that these analyses teach us is that when the effects of caffeine are wanted they are best obtained by the use of the pure alkaloid, and not by a pretended and uncertain compound of it.

Mercurials in Diphtheria.—DR. A. JACOBI in a paper read before the New York Academy of Medicine, after giving a thorough historical review of the use of mercury in diphtheria, gave the result of his own observations, which have led him to a higher estimate of its value than he held a few years ago. He concludes the paper as follows:

First. The mercurial treatment of pseudo-membranous affections of the respiratory organs is promising of great results.

Second.—The corrosive sublimate is the preparation best adapted for internal medication.

Third.—The system must be brought under its influence speedily by frequent doses.

Fourth.—It must be given in dilutions of 1 to at least 3,000 to 4,000.

Fifth.—Babies of tender age bear one-half grain and more a day, and many days in succession.

Sixth.—Salivation and stomatitis are rarely observed, and appear to heal kindly. Gastro-intestinal disturbances are not frequent; they are moderate, can be avoided by the administration of mucilaginous and farinaceous food, or of mild doses of opium.

Seventh.—If not well tolerated, the inunction of sufficient and frequent doses of hydrargyrum oleate takes the place of the corrosive chloride, either together, or alternately with the *internal administration*.

Eighth.—The treatment of croup may be preventive to a great extent. Most of the cases are complicated with, or descend from, diphtheria of the fauces. Here the preventive treatment of croup must begin. Without desiring to encourage mere local treatment, which, in unwilling patients has to resort to force or violence, and thereby does great harm, I point to the peculiar local effect of mercury on the pharynx, both in the healthy and sick, as a means to influence the threatened invasion of the larynx.—*N. Y. Med. Record*, May 24, 1884.

Typhoid Fever.—DR. REEVES, Secretary of W. Virginia State Board of Health, in a paper read before the Medical Society of that state, says that he rarely uses quinine in typhoid fever. When the tongue is dry, red and pointed, he regards it as a true poison to the nervous system. He then gives ergot internally, and when the temperature is high, he applies cold to the *wrists* by means of rubber tubing coiled around them, through which a stream of ice water flows from the reservoir of a fountain syringe. In this way the temperature of the whole body can be promptly and surely reduced. He thinks that the ergot assists to prevent excessive rise of the temperature and also diminishes the likelihood of intestinal hemorrhage.

Manaca in Rheumatism.—C. M. CAULDWELL reports the use of manaca in thirty-five cases of rheumatism, and from this experience he regards it as a very valuable remedy. He first tried the effect of the drug upon healthy persons, with the following results. Twenty-drop doses were administered five times a day for a week. The appetite was increased, a slight odor of valerian was imparted to the urine, pulse and temperature were not affected, and no abnormal sensations were produced.

The drug was then prescribed for a variety of cases of rheumatism ranging in age from eleven to fifty-eight years, the dose varying from half a dram to one dram, three times a day. In no case was the digestion disturbed, but in several of them the tongue cleared and the appetite improved. Frontal headache or a sense of

fulness in the head developed in about one-eighth of the cases after the remedy had been pushed for a few days.

In two cases of acute rheumatism with high temperature it utterly failed to relieve the pain or to reduce the fever. In chronic cases it frequently gave relief, and in some of them all the symptoms slowly disappeared. He thinks that better results would probably have been gained by giving larger doses, as six drams or more per diem. The best results were had in subacute cases without fever. Fourteen of these cases were treated, of which twelve recovered and two were not benefited.—*N. Y. Med. Record*, July 12, 1884.

Calomel in Diphtheria.—DR. I. P. KLINGENSMITH reports the successful treatment of three cases of diphtheria with large doses of calomel. He gave first twenty grains and then ten grains every hour until the symptoms were relieved. In one case, during three days, seven hundred and twenty grains were administered; in the second case one hundred and sixty grains were given in fifteen hours; in the third case one hundred and thirty grains were given in twelve hours. He recommends this treatment to further trial.—*N. Y. Med. Record*, July 12, 1884.

Hepatica.—MESSRS. J. U. & C. G. LLOYD, of Cincinnati, have been investigating the liver-wort, and have found much that is new and interesting in connection with the commercial and botanical history of this drug. Of late years this drug has been extensively consumed in the preparation of certain proprietary medicines. It appears that last year over 340,000 pounds were consumed, while four years ago the entire consumption did not reach 10,000 pounds. In this country we have two species that produce the drug, named *anemone acutiloba* and *anemone hepatica*, which very closely resemble each other, except in the shape of the leaves; the former has sharp lobes to the leaves; the latter, blunt lobes.

Our pharmacopeia has recognized but one species—the round-lobed form. It is proven, however, by Messrs. Lloyd, that nine-tenths of the native drug of commerce is collected from the sharp lobed species, which has never been officially recognized. The medical properties of *hepatica* are unimportant. The plant does not contain an active principle, and is as devoid of characteristics as is the grass of the field. Of the vast amount of the drug consumed, it is creditable that the medical profession uses but a small

per cent. Almost the entire lot is employed in the preparation of certain secret remedies.—*Drugs and Medicines of North America*, July '84.

Propositions Concerning Vaccination. — JAMES F. HIBBARD, M. D., presents the following propositions in a paper read before the American Public Health Association at the annual meeting, 1882.

1. Perfect vaccination is a positive protection against small-pox, i. e., vaccinia of a typical development is as much a safeguard against variola as is a primary attack of variola against a secondary attack of the same.

2. Taking vaccination as ordinarily accomplished, an unknown but large percentage of the vaccinees will be liable to an attack of true or modified small-pox at some future time.

3. The number of persons who have had vaccinia that will be liable to small-pox increases with the lapse of time after the date of vaccination.

4. Neither our observation of the progress and termination of vaccinia in an individual nor our subsequent examination of his cicatrix, will enable us to say whether or not such individual is liable to small-pox.

5. The only practical and reliable evidence we can have that an individual who has had vaccinia is not liable to small-pox, is the failure of revaccination.

6. When vaccinia cannot be induced by vaccination, variola cannot be induced by inoculation.

7. A failure of primary or multary vaccination is evidence that such person is not impressible by small-pox contagium at that moment, but is not trustworthy testimony that such person will not contract either vaccinia or variola at some future time.

8. In order to obtain and maintain the completest protection that vaccinia can afford, revaccination should be repeated, say every five years.

9. Revaccination may induce vaccinia, or it may induce vaccinoid; and whenever vaccination, primary or multary, is followed by vaccinia, the vaccinee was liable to variola, and whenever such vaccination is followed by vaccinoid, the vaccinee was liable to varioloid.

10. Active, unadulterated vaccine virus, bovine or humanized, will induce nothing but vaccinia in healthy individuals.

11. The nature and extent of pathological changes that may ensue from the insertion of true vaccine virus is always because of a morbid condition of the vaccinee.

12. When disorders not belonging to vaccinia are induced by the insertion of true vaccine virus, it is always because of a morbid condition of the vaccinee.

13. Vaccine virus, originally pure, may undergo such change in time as to be either, first, inert; or, second, poisonous.

14. Some latitude in the length of the period of incubation of vaccinia, and some irregularity in the development of its symptoms, are not incompatible with, and should not be held to invalidate, its protective virtue.

15. It is not certain that typical vaccinia, the product of bovine virus, is a better preventive of small-pox than typical vaccinia, the product of humanized virus.

16. All things considered, bovine virus is less likely to be contaminated than humanized virus.

17. A physician's confidence of the purity of bovine virus must rest on his faith in the knowledge, the skill, and the integrity of the party who cultivates it.

18. While fully recognizing the desirability of universal vaccination, it is obvious that it can be accomplished at this time among the people of the United States, neither by persuasion nor by compulsion.

19. An attempt at compulsory vaccination will not only fail of success, in the existing state of public opinion, but will seriously retard the growth of faith among the populace that universal vaccination is a reasonable service.—*Reports and Papers of American Pub. H. Assoc. Vol. VIII, p. 123.*

Turpeth Mineral.—Dr. A. N. RANDOLPH calls attention to the fact that turpeth mineral sometimes causes unpleasant, or even dangerous symptoms. Having had several cases in which severe diarrheal symptoms were produced by the administration of therapeutic doses of this drug, he has taken pains to study up the subject and concludes:

1. That a dangerous quantity of turpeth mineral often remains in the stomach after emesis.

2. That this drug possesses sufficient toxic and irritant properties, not only to demand from the profession much more than usual caution in its administration, but to condemn its use where the exhibition of any other emetic is practicable.

3. That it should not be placed in the hands of the laity.—*Med. News*, March 8, 1884.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL
SOCIETY.

Stated Meeting, June 17, 1884.

PELVIC INFLAMMATIONS.

Dr. G. A. Moses.—I desire to report some cases, Mr. Chairman, illustrating certain forms of pelvic inflammation. One of these particularly exemplified a form of disease described by Duncan as remote parametritis, remote as to the period of time when it makes its appearance after the occurrence of the producing cause, and also as to the locality affected. This case, peculiar in other respects as well, is that of a lady who was confined last June a year ago with her third child. I was not her attendant at that time, but had been in previous labors. She was in a healthy condition when I returned to the city, and found her with a child two weeks old. She said that she had not suffered as much with any of her former labors. This labor had been normal. She went to the East after getting up and spent a portion of the summer and came back feeling badly, with various symptoms indicating some uterine disturbance. On examination I found a deep laceration on the right side of the cervix extending not only to the junction of the vagina, but really into the vaginal tissues, the deep portions of the laceration being, as is common under those circumstances, deflected from a straight line. The other side of the cervix had a slight laceration. The cervix was hypertrophied, and its vaginal surface eroded and excessively tender. There was some uterine subinvolution and the general health was depressed. After a few months treatment her health somewhat improved, but she was subject to extreme nervous attacks and became very much depressed. Her general nutrition was imperfect, though the erosion was finally quite relieved and the condition of the cervix ameliorated, quite an extensive operation having been made which resulted apparently in perfectly relieving the trouble. The case was discharged about the first of May; the

operation had been done on the 12th of April, 1883. Shortly before I left her, going to the East, she appeared to be in excellent health, telling me she had not been as well in a year.

The day before I left the city she sent for me, complaining of pain in the right side; this, however, was overcome in a few hours. I returned to the city about the 28th of May and learned that she had been out taking a ride and had got caught in a slight rain. Three days afterward she was attacked with pain running along the inner side of the right thigh. This pain was periodic and, at times, very severe. I saw her after she had had this pain a week, and it was then worse than it had ever been. It followed the course of the anterior crural nerve into the pelvis. Still she had no fever, I think, at all.

Dr. S. G. Moses.—She had fever when you were away.

Dr. G. A. Moses.—The uterus was perfectly movable, not sensitive, and no portion of the vagina was sensitive; upon bimanual manipulation no indication of any inflammatory process whatever in the region about the uterus could be observed, but on the right side about the border of the sacrum, and reaching from that bone across the ilium I could trace a narrow line of intense pain which seemed to follow the course of the crural nerve, and some slight hardness. Immediately above Poupart's ligament on the same side there seemed to be an enlarged and sensitive gland, and some little distance down there was tenderness. The pain came on as nearly as possible at eight o'clock at night, and with a preliminary darting sensation of heat along the course of the nerve. These attacks of pain recurred at intervals of two to four minutes, gradually increasing until they became extremely intense, so that the patient would scream out in agony. This pain was aggravated by pressure or forcible extension of the thigh. It was relieved promptly enough at first by the subcutaneous use of morphia, so that the patient would get a night's rest, no rise of temperature following; and next morning she would feel as well as ever, no trace of pain being left. The only tenderness now was within the pelvis just along the course of the nerve from half an inch to an inch or a little more over the region of the uterus. Still there was pain above Poupart's ligament upon pressure; not very great, however. This increased steadily, requiring the subcutaneous use of morphia at night, which had to be administered regularly at eight o'clock, and finally at half past seven, and then at seven o'clock. Among other kinds of treatment

adopted, particularly on account of the apparent intermittent character of the pain, I gave 20 to 30 grains of quinine in the course of a day, and I afterward applied a blister. Thorough narcosis produced no effect upon the pain. From the moment the blister took effect the pain above Poupart's ligament stopped, and there was neither pain nor tenderness, and absolutely very little pain anywhere; but in the course of a few days the pain appeared again, but not in the neighborhood of the nerves of the thigh, and got as violent as ever; and the attacks, instead of being limited to the evening, began in the morning and evening, always however very nearly at the same hour. I believe there was in this case inflammation of the connective tissue around the nerve, perhaps the nerve itself or its neurilemma, and I think there was inflammation of the connective tissue about Poupart's ligament. Tenderness still remains; the patient's general health is somewhat improved and she takes nourishment regularly and her appetite is good. The pain does not now come on quite so frequently, but otherwise I see very little change in my patient; perhaps she is somewhat better. The case is of particular interest to me from the fact that I consider it one of pelvic inflammation resulting from exposure to cold, perhaps of a part already sensitive, and believe it to be the same character of inflammation as the ordinary so-called cellulitis or parametritis.

Another case happened also during my absence, that of a lady who was delivered in normal labor of a good sized child. I had attended her over two years ago soon after her marriage, at which time she had a parametritis of a very severe character, being ill a month or six weeks, but finally recovered nicely. I saw nothing more of her until she sent for me and told me she was going to be confined. She was in excellent health and her labor was natural in all respects. A few days after the confinement she had a chill followed by a rise of temperature to 104° . The lochia I believe were normal in all respects; there was some little fever and some very slight tenderness over the abdomen. The high temperature gradually subsided and in a few days fell to the normal grade. Excepting some dysuria she had no pains remaining, but at the time I saw her she was having the same character of periodic pain that occurred in the first case, not following the course of the same nerve, but seemingly beginning high up on the right side of the loin in the region of the kidney, and following the course of the right ureter almost exactly. This pain came on periodically, precisely as it did in the first case.

I found, however, that involution had been imperfect, but there was very little uterine discharge. I introduced a probe into the cavity and wiped it out.

Dr. Ford.—How long was this after labor?

Dr. G. A. Moses.—About four weeks; the uterine cavity seemed to be very little sensitive; the uterus was perfectly movable, but sensitive; there seemed to be no special indication for any interference in the interior of the organ. The pain gradually subsided up to yesterday, when it seemed to increase, the inflammatory process apparently extending downwards. There seems to be a diffused peritonitis commencing from above and descending into the pelvis. The uterus was examined yesterday again; it was found to be partially flexed, the cervix rather hard, seemingly somewhat infiltrated. Now this is another case of apparent periuterine inflammation beginning at a remote point. Such cases have been reported appearing even at a longer time after parturition than in this case, and developing finally into abscess which took the course of the ordinary psoas abscess fully six or seven months after delivery. Parturition seems to have given rise to some inflammatory process of insidious character, not attracting the attention of the parturient or of the attendant.

These cases are particularly interesting, as they relate to a peculiar form of inflammatory process which is often overlooked. Our attention is attracted by the periodic pain, neuralgic in character, though no inflammatory process can be observed until careful examination reveals perhaps a small nodular point of hardness due to adenitis or lymphangitis developed subsequent to parturition or to operation about the neck of the cervix especially. These inflammatory points, small in extent perhaps and overlying the trunk of some important nerve, induce these peculiar pains. One peculiar point is the periodicity of the pain, which in one case had occurred almost exclusively in the evening without apparent local inflammatory action.

Dr. S. G. Moses.—I merely wish to remark that I attended the first lady during my son's absence; there was tenderness immediately over the place which is tender now near Poupart's ligament. The pain was periodical, and he was taking quinine at the time. I used counter-irritation, the tincture of iodine and poultices, which relieved her for a few days. When she got well enough I told her to go to the country, and she did so, but in three or four days after-

wards she returned, saying that the trouble was worse than it had been before she went out.

Dr. Gregory.—How great was the interval between the time of the possible cause and the occurrence of this complication?

Dr. S. G. Moses.—About a month.

Dr. Gregory.—Was that about the length of time in both cases?

Dr. G. A. Moses.—In the parturient case it was earlier, it was a little over three weeks.

Dr. S. G. Moses.—I saw the case referred to to-night in consultation with the gentleman who attended her. She had a very decided attack of fever on the third day, the fever was so high that he called me in to see her, her temperature was then 104° or 105° .

Dr. McPheters.—I presume you operated for the laceration of the cervix; how long after that operation was it that these nervous symptoms set in?

Dr. G. A. Moses.—A month, by which time the wound had healed up.

Dr. Gregory.—This is a very interesting subject, and these intervals would seem to indicate some other cause than the one to which we are wont to assign it. There seems to have been some intercurrent agency, as when a fall is followed at a distant period of time by some local trouble. I make it a rule to ask "How long is it since this trouble began?" If it be about a month, I infer that the last complaint must be connected with the fall.

Dr. McPheters.—We have all doubtless known convulsions and other nervous diseases to follow injuries to children which at the time were regarded as trivial. Subsequently, however, when convulsions set in without any assignable cause, the fact of the fall is ascertained on inquiry. Here we have no difficulty in tracing the effect to its cause.

Dr. Gregory.—I have no doubt that is correct. Between most injuries and ultimate sequelaë there is some connection. What imparts so much interest to these cases is this probable connection, but it is not always easy to make it out.

Dr. Briggs.—In the first case did the doctor regard this enlarged gland as the cause of the pain?

Dr. S. G. Moses.—Not at all. A month after the operation he went away and I took charge of the case. The woman was apparently quite well when she was taken with this intermittent pain coming on in the evening, not very severe at first. I consider that there was a

subacute inflammation going on gradually which has finally evidenced itself. The patient was so well that she rode out seven miles in the country, spending the day there, and she came in, and in coming in got wet; she walked around the square the next day and felt perfectly well. I had already discharged her as a patient, feeling that she was entirely well when she was taken with these symptoms. At first she attributed them to sitting so much in one position; she was only taken worse four or five days afterwards with this excruciating pain. Before that, although she had suffered more or less, she was up every day sitting at the window, reading and sewing and attending to her children; there was very little tenderness, but she complained afterwards of an exacerbation of her symptoms, of a feeling of stiffness in the right leg, and of a sensation as of the breaking up of adhesions when she walked; these symptoms are present now and she is under treatment.

Dr. Engelmann.—Are the pains still intermittent?

Dr. S. G. Moses.—Yes, sir.

Dr. Engelmann.—Have they been relieved?

Dr. S. G. Moses.—She is still under treatment and is suffering yet. I have seen her since she has had a recurrence of the attack; I suppose there was subacute inflammation going on; she never suffered nausea.

Dr. McPheeters.—In cases of dislocated ovaries there is always pain on pressure, is there not?

Dr. Boisligniere.—Oh, yes, in a case of dislocated ovary there is pain on pressure; indeed it is very common in dislocation of the ovary to observe intense pain. There may be a displacement of the womb as a cause of displacement of the ovaries, because the ovaries are the satellites of the uterus. If there is an involution of the womb we naturally have an involvement of the ovaries in the trouble.

Dr. Briggs.—In this attitude may not the womb be displaced simply dragging down the ovary, making severe tension on it without actual displacement.

DEATH WITHOUT REACTION AFTER OVARIOTOMY.

Dr. Gregory.—This day, Thursday, two weeks ago, I removed an ovarian tumor by laparotomy, but the patient never reacted, and died on Sunday morning about two o'clock. On the evening of the day of operation the pulse was feeble, a little less than 100, and the temperature natural, and there was every reason to believe the pa-

tient would react satisfactorily; but about daylight the next morning she became almost pulseless, and I was sent for. When I reached her the pulse was barely perceptible. She remained in an almost pulseless condition, and her breathing was not satisfactory, and she was cool. This continued through the day (Friday) and on Saturday, and she died on Sunday morning at about two o'clock. She never reacted satisfactorily, sinking gradually from the time of the operation

It was a very simple case—the simplest ovariectomy I ever performed; there was but one cyst tapped and then the mass came out and exposed a small pedicle which a single ligature was sufficient to encompass. This was removed, the pedicle dropped loosely in the pelvis, and the wound closed. The abdominal incision was not more than three inches in length; the hands were not passed into the abdominal cavity at all, only two fingers, and there was no site where there could be any hemorrhage except from the pedicle; there were no adhesions, and persons who stood by, in fact a relative of the patient, a physician who stood by her, was so astonished at the short time consumed, the little manipulation, and the small size of the wound that he could scarcely retain his enthusiasm; seeming to feel that the woman must recover.

Dr. Boisliniere.—Was the abdomen opened after death.

Dr. Gregory.—No, sir; we did our best to get a post-mortem, but could not. The only suspicion we had was the possibility of hemorrhage having taken place from the pedicle. The abdomen was perfectly flat above the pubes, and upon bimanual manipulation we would almost certainly have discovered it if there had been hemorrhage, but there was nothing to indicate that hemorrhage had occurred.

Dr. McPheters.—How long was she under the influence of the anesthetic?

Dr. Gregory.—About thirty-five minutes.

Dr. Boisliniere.—Did you use any carbolic acid?

Dr. Gregory.—None at all, we dispensed with it.

Dr. Briggs.—Did you use any other antiseptics?

Dr. Gregory.—We used a two per cent. solution to put the instruments in, but they were washed in warm water.

Dr. Boisliniere.—Was the cavity not washed with carbolic acid?

Dr. Gregory.—No, we sponged the abdominal cavity; a sponge

was introduced to see if there was any blood, but there was none found.

Dr. McPheeters.—Did she fully recover from the effect of the anesthetic?

Dr. Gregory.—She seemed to do so, and on Thursday evening we supposed she would react and be all right next morning, but in this we were mistaken, as she passed into a condition of syncope, and died in that condition on Sunday morning shortly after two o'clock. We kept up stimulants all day Friday and Saturday and were hopeful that in time she would react.

Dr. Ford.—Was there any sign of peritonitis?

DOUBLE OVARIOTOMY.

Dr. Gregory.—None whatever. I operated again last Monday upon a double ovariectomy, removing the ovary from both sides, inflicting, I would say, three times as much injury, and the patient hasn't had any alarming symptoms whatever up to this evening. Here we have two cases in striking contrast, a double ovariectomy occupying an hour and a half, the patient being under the influence of the anesthetic for an hour and a half, and in which we removed seven cysts, and the one which resulted fatally after a short operation, without adhesions and where a very small opening was made.

Dr. Engelmann.—Were there any evidences at all of oozing or hemorrhage?

Dr. Gregory.—There was no sign of any bleeding in the abdominal cavity when we sponged it out. The vagina seemed normal, whereas if there had been hemorrhage and the blood had flowed into the abdominal cavity there would have been some pressure, some fixation and tension of the vagina. We did our best to get a post-mortem in this case, but could not.

Dr. Briggs.—Was there anything peculiar about the condition of the patient, disease of the kidneys or some unusual nervousness?

Dr. Gregory.—Nothing of the sort as far as we could detect. The patient was rather a slender person; in fact, was rather weak. When I was consulted in regard to the case by a physician who was related to the patient, I said to him that my rule in all these cases is to advise patients not to be operated upon until they are unfit for usefulness. As long as they can be useful and comfortable I advise them to wait. He objected that she might become pregnant. That was reasonable enough, because she had observed this tumor

for some months, and given premature birth to a fetus only fifteen weeks before this operation.

There was a disposition on the part of this woman to be operated upon because she could not brook the idea of carrying such a tumor. It was a burden to her; and she tripped into the room to be operated upon with a smiling face and bade adieu to her husband with much activity and vivacity. She took her position on the table as if glad of the opportunity.

I have always advised my patients to wait as long as they can go about, and as long as they can make themselves useful in any way. I recollect a case which I reported here two or three years ago, where a girl whom I was attending was anxious to be operated upon and I advised her to wait; she was at school when I called to see her, and I was going away; she happened to see me and ran to overtake me, and I said to her "Miss Mary, I won't operate upon you, because I saw you run; whenever you can't run I will operate upon you." She remained at school two years and attended to her classes for two terms of ten months each before I operated and she recovered. Here were two years saved. Now I do not think the operation is at all more dangerous when performed late than early, and two years is something to gain. This is the second easy ovariectomy I have performed; the first died in 32 hours and the second a few hours later. These are interesting facts; let every one contribute his facts.

Dr. Engelmann.—The report of these cases is very interesting, but we must not regard isolated cases. When we come to consider facts that have been demonstrated by hundreds and hundreds of cases abroad, we will see that early ovariectomies are not so fatal. When ovariectomy was in its infancy abroad, cases came late to the surgeon, as they will do in this part of the country or in the United States, and they had poor results as we will. In the early days of the operation the cases came to the surgeon late, they came when they were oppressed, only when the patients were no longer useful, when they could no longer live; these patients were operated on at first, and their cases were mostly difficult. Now it is extremely interesting to note in Germany and England, the number of eminent ovariectomists and the success that has been attained. The idea has become prevalent that ovariectomy is an easy operation, and every one who has an ovarian tumor is willing to have it removed as early as it can be recognized, and consequently the successes in

the operation have become very numerous. In Germany this transformation is now going on and Dr. Martin, who is comparatively a young man, is just living through that period. He told me last year that he was now beginning to have easy operations; they were beginning to come to him early and his success is a great deal better. Of course his skill is greater, but he has made it a point to advise early operations, to recommend the operation as soon as the disorder is recognized, and now the patients are beginning to come in early; they have weeded out the old cases and are now treating a better class. He told me that he operated as early as possible and that these patients do not wait until they are obliged to be operated upon. We do not hear in this city so much about allowing the operation to wait until there is a certain tolerance of the tumor by the patient, about the parts getting accustomed to the pressure of the tumor. It was said at one time that the parts became tolerant of the tumor, and that consequently the operation upon the peritoneal cavity was not attended with as much danger. Physicians are beginning to realize the importance of early operations, and we will see that the results will be better. The results heretofore have not been as encouraging as they might have been, because the patients have generally come in when they could not live longer without an operation.

Dr. Gregory.—I can say nothing except that I have had but two or three easy cases and they have all died, and have died quickly.

Dr. Maughs.—It will be recollected that shortly after the formation of this society, this question about early operations was under discussion. Dr. Hodgen stated among others that he was not hunting up cases upon which to perform ovariectomy. The general sentiment as expressed at that time was unfavorable to the performance of the operation, if it could possibly be avoided. The society was almost unanimous at that time against the advisability of performing the operation except in cases of extremity; and at that time I presented some results in which it was stated that in all cases of clearly recognized ovarian tumor no operation should be performed until the constitution was affected; that the operation should not be performed unless it was absolutely necessary. This view was adopted by the society and Dr. Hodgen voted for it; he accepted it after making some remarks in regard to a certain character of cases. There is nothing peculiar about Dr. Gregory's case except that the patient bled to death.

I think, if he had made a post-mortem examination, he would have found that the patient died from hemorrhage.

I remember performing ovariectomy in a case in which there was cancer of both ovaries and also of the uterus. The patient had a large effusion into the abdomen, was not able to walk; in fact was in the last extremity. I diagnosed very clearly a cancerous tumor and told her that an operation did not promise much, but that I thought we could at least make an incision and draw off the ascitic effusion. In doing so, I accidentally wounded the projecting tumor of one of the ovaries; both ovaries were enlarged, but as I had wounded this ovary I was compelled to remove it. I opened the abdomen and removed a large encephaloid mass, and of course the other ovary had to be removed on account of its cancerous condition. In this case, on account of the brittle nature of the tissues, one of the ligatures gave way and the patient was about to bleed to death; the ligature cut through to some extent and I had some difficulty in securing the pedicle against bleeding on account of the readiness with which this cancerous mass broke down, but applied a thicker ligature and passed it lower down on the stump, thus preventing the bleeding. The uterus was enormously enlarged and the whole organ was covered by a vascular net-work of cancerous material, and in handling the parts some of the vessels gave way; I arrested the bleeding after much difficulty. The ovaries were found to be solid cancerous masses, the largest about the size of a child's head. The vascular net-work of blood-vessels alluded to was exceeding friable and broke down readily, so that on handling the organs the vessels were ruptured to some extent, and as a matter of course the oozing of blood went on. I found that it was not possible to repress this entirely except by extirpating the uterus; and at one time I did throw the *écraseur* around the uterus and tissues to remove it, but the patient had lost a great amount of blood and was in such a condition that I felt she was not able to stand such an operation; so I resorted to the use of red hot iron to arrest the bleeding. I carefully examined the uterus and vagina and supposed I had arrested all the bleeding, but three or four hours after the operation reaction came on and symptoms of hemorrhage occurred; these symptoms were just about the same as those which Dr. Gregory enumerated. Half a gallon of blood may flow into the pelvic cavity from which a large ovarian tumor has been removed and present no external evidences of its presence. In

the case in which I operated, I told the doctors present that I was afraid there was oozing, but there was no possible chance of saving the woman from the bleeding of cancerous surfaces that didn't admit of ligation. As it was, we used stimulants and she lived until the next day.

A year ago this spring a lady came to me from Springfield to have an operation performed for the removal of an ovarian tumor. I examined her and told her that she was suffering with an ovarian tumor and that it could be removed, but that everybody didn't get well who underwent the operation and possibly she might not get well. At this information she became thoroughly demoralized and begged to be allowed to go home. I saw that she was so frightened that if she had been placed upon the table she would have died from fright. So I told her husband to take her home, as I preferred not to operate upon her while she was so alarmed. I told her husband that she would some day want to be operated upon when it was too late. About four or five weeks ago her condition became so alarming that I was sent for to operate. I diagnosed a semi-solid and adherent tumor of the left ovary. The abdomen was opened with some difficulty; we found the tumor adherent to the abdominal wall, and I was compelled to use a block-tin sound, and finally my finger to break up the adhesions. The incision extended to the ensiform cartilage; the solid tumor was removed, the pedicle secured and dropped into the cavity. There was no bleeding, and the patient got well without any bad symptoms, and is now entirely well.

DR. L. CH. BOISLINIERE read the following Obituary of
DR. GEORGE ENGELMANN.

Dr. George Engelmann was born at Frankfort-on-the-Main February 2, 1809, was educated at Frankfort, Berlin and Heidelberg and Wurtzburg, removed to the United States in 1832, and died February 4, 1884. He settled in St. Louis in 1835, where he practised medicine up to two days before his death. He was president of the St. Louis Medical Society in 1852. In 1836 he was one of the founders of the Western Academy of Natural Sciences, which held regular sessions for several years. The St. Louis Academy of Science was organized in March, 1856, and continues a valuable organization to the present time. Of this Society Dr. Engelmann was for many years the president, and he has contributed much to the value and interest

of its sessions and its publications. For many years he carried on a very large and laborious practice, and was recognized as one of the leading practitioners in the city. He had a large midwifery practice and was the first one in St. Louis to use the forceps in difficult cases, in which he was at first bitterly opposed by other practitioners.

In addition to the conduct of an arduous practice, he has made original investigations, which have given him a world-wide fame as a botanist. He made meteorology an especial study, principally as connected with sanitation, and kept a record of meteorological observations for over forty-seven years.

Dr. Engelmann practised medicine in St. Louis longer than any other physician now living. At the age of 75 he was still occupied with study and work which many a younger man would consider onerous, and manifested an enthusiastic interest in professional and scientific affairs which put to shame the indifference of those who have far less right to rest upon their laurels than he had.

Dr. Engelmann was a member of thirty-four learned societies of Europe and this country. He was elected member of the St. Louis Obstetrical and Gynecological Society February 16, 1878.

The following details are abstracted from the able remarks of Prof Nipher, and Mr. M. L. Gray at the "Memorial Meeting" held at the Academy of Science, February 24, 1884:

"Dr. Engelmann helped to organize the Academy of Science of St. Louis on the 10th of March, 1856, and was chosen its first president, and the charter granted by the legislature of our state on the 17th of January, 1857, was accepted on the 9th of February of the same year. There were other men of great ability and scientific attainments associated with Dr. Engelmann in the formation of this academy, several of whom are still living; and of those dead I may mention Drs. Hiram A. Prout, Benj. F. Shumard, M. M. Palen, Charles A. Pope and M. L. Linton, upon the graves of each of whom well known to us, I would place a flower, a forget-me-not, while speaking of their associate, Dr. Engelmann, more recently deceased.

"The published proceedings of the academy show that from its first formation down to the time of his death, Dr. Engelmann was a constant attendant at its meetings, and for the greater part of the time its president and also chairman of the committee on library, on publication, and, for the last twenty-five years, of the committee on botany.

"The transactions of the Academy are greatly enriched by articles from his pen, mostly on botanical and meteorological subjects, in which fields of study he took especial delight, and in which, also, he was scarcely without a peer, especially when we consider that the time he had to devote to these subjects was only the leisure hours snatched from the labors of a large and successful practice of his profession.

"How few of us, Mr. Chairman, have ever accomplished, or can hope to accomplish so much in the intervals of a busy life? All honor to our deceased associate, who has achieved so much and so well in the pauses of an active career!

"But not only are the transactions of our society enriched by elaborate treatises by Dr. Engelmann on the various subjects that engaged his attention, but especially have our meetings been made interesting and instructive by the oral remarks, explanations and illustrations that have fallen from his lips, on the wide range of topics that, from time to time, have engaged our attention.

"It was this aspect of his character that most interested me, and that I recall with the greatest of pleasure, and shows to my mind not only the richness and universality of his knowledge, but also the precision and logical correctness of his mental operations, and the directness and certainty with which he reached true and just conclusions. No matter how varied were the subjects introduced for consideration and discussion, Dr. Engelmann was always ready and prepared, in a pleasant and unassuming way, to throw additional light on them, and illustrate them by new facts not presented by others, and if false or unscientific theories or views were presented, his clear insight would at once detect the sophism and expose the sham.

"Then, too, on his returns from summer trips, or other excursions he always came laden with new observations and discoveries, gathered from his close study of nature and natural objects, treasured up in memory and imparted with almost boyish pleasure for the edification of the fellow members of the academy."

"As evidence of the high esteem entertained for Dr. Engelmann by his scientific brethren of America, and of their regard and affection for him as a man, I wish to refer to a matter that came within my own observation. When the American Academy of Science held its anniversary in this city, a few years ago, it was my good fortune to be present at some of its sessions, and I was

struck with the great respect and deference, almost veneration, shown by that body of learned men toward Dr. Engelmann, who then, for the first time, attended upon their deliberations.

They seemed to look upon him as their master and teacher, and as one at whose feet they were willing to sit and learn. It was a most touching tribute, spontaneously and worthily paid to one with whose learning and genius they were all familiar, but whom they, as a body, had not before met.

"Much in the same way, I am informed, he was regarded by the learned men and scientific societies of Europe. Beyond question, he stood in the foremost rank of the learned men of his time, in the departments of study to which he especially devoted himself, and in his death the scientific world has lost a diligent and conscientious student, but we have lost a beloved instructor, companion and friend. The kindly and genial nature, the modest unassuming manners, the sincerity, simplicity and uprightness of his character and life, made all who knew him his friends. Though he had reached the allotted period of human life, yet scarcely had his eye become dim or his natural force abated, when in the fullness of years, he was gathered to his fathers. It remains for us to cherish his memory, be stimulated by his virtues and profit by his example. As eloquently said by Mr. M. L. Gray, the pines, the firs and the flowers, whose habits he studied and so lovingly described, send forth their fragrance upon the air to give pleasure and health to those who inhale it, so may the aroma and sweetness of his life and character stimulate us to better living and doing.

"Dr. Engelmann's earliest publications were made in 1832, and consisted of two small volumes. In 1837 he made extended tours through Missouri, Arkansas, Kansas, Indian Territory and New Mexico. At this time he also began his temperature and rain-fall record, which, with the exception of a few gaps when absent from the city, he continued down to within a few days of his death. His last report on the meteorology of January was made out after all hope of life had been abandoned by his physicians. In 1843 he accompanied the party which made the survey of the Mexican boundary, and this field work occupied him two years. The results of his investigations were published in a large work by the government, in a report entitled, 'A Description of the Cactaceæ of the Boundary, with seventy-six plates'.

"Dr. Engelmann was a true type of scientific man. He labored

solely to advance the boundary of knowledge, and without any reference to the pecuniary value of the results reached. Sometimes his knowledge was of immense financial value, as when his advice was sought by the agents of the French government regarding the use of native American grapes as grafting stock for French vineyards. But this was not the motive which prompted his work; had it been so it could not have been done so thoroughly and well. I need not say that his aim was to do his part in the solution of great problems which interest us all, and that his reward was the noble joy which attends the discovery of truth".

In the eloquent words of Prof. Nipher at the memorial meeting at the Academy of Science:

"Dr. Engelmann's fame is not an affair of newspapers, and of to-day. The plants he introduced to his brother botanists will come forth each year, many of them bearing the names he gave them, and will introduce him in turn to each succeeding generation of men. He sleeps well; and his beloved oaks, standing like sentries around his new-made grave, join in solemn chanting and give gentle voicing to the sorrow which fills all our hearts."

Having been allowed the privilege of reading a short autobiography of Dr. Engelmann, the following extracts are presented and are interesting as giving an insight into his inner life. This extract is presented in his own words:

"My father was one of the youngest members of the large family of Engelmanns, many of whom labored in the Divine service. He himself entered into the study of Theology at the University of Halle, where he became a doctor of philosophy. He then became the friend of Humboldt, Schlosser the historian, Mieg and other distinguished men. He possessed literary tastes and published a number of works on educational topics, and opened an institution for the education of girls. In the spring of 1815 Dora Hortsman, then 11 years old, entered our house as a scholar and member of the family, and when I entered the University of Heidelberg, in 1827, a correspondence with my cousin began which continued until the time of our union in 1840. These letters, which I have preserved, gave an evidence of her sterling qualities and excellence. In the fall of 1828, in consequence of an uprising of the students, I was obliged to leave Heidelberg and enter the University of Berlin"(It was at this time that in a student duel he received a wound on the upper lip, the scar of which he concealed by a moustache). "I then left

for Paris, where I met Braun, Agassiz, Constadt and other friends, and there we led a glorious life in scientific union, whilst I continued my medical studies. Then came the plan of my uncle in Wachenheim to send me to America for the purpose of investing money for him in that country.

"A few days at Kreuznach sufficed for an understanding with Dora. We belonged to each other forever, but the fulfillment of our wishes lay in the dim distance.

In September I sailed from Bremen, reached Baltimore in December, going from there to St. Louis by a circuitous route and remained at first with a friend of my uncle Joseph upon a farm some ten miles from St. Louis until the spring of 1835. After an adventurous journey through the Southwest, sick and absolutely penniless, I returned to St. Louis, where I settled down in the practice of medicine in December, 1835. In 1837 I received a rather lucrative offer, and spent three months traveling through Arkansas for the purpose of studying its geological and mineral wealth.

"With this exception, however, I worked hard and practised medicine to earn sufficient to fulfill our wishes. This was possible after four years of struggle. Dr. Wislizenus was willing to take my place and remained a partner in my practice until the time of his trip to Mexico in 1846. In January, 1840, I left for Europe and was married on the 11th of June of that year.

"By September we had returned to St. Louis. Our means were exhausted, practice poor, but after five or ten years of hard work and many privations for both of us, we were at length in an independent position.

"A splendid boy baby was born in June, 1843, and died the next July, of summer complaint, then so fatal to children in St. Louis. With pleasure not unmingled with sorrow did we greet the birth of a second son on the 2nd of July 1847, George J., who, however, developed rapidly without sickness of any kind.

"In 1847 I was in a position to purchase a lot on the southwest corner of Elm and Fifth, and our troubles were ended.

"Matters progressed rapidly. A house was built upon the lot, into which we moved in December, 1847.

"Practice developed rapidly, giving me all that I could possibly do, so that we were enabled to leave for two years, in 1856, paying a visit to my mother and sisters, and spending two delightful years in Europe in travel and study. We returned in 1858. George en-

tered the Washington University and left us in the fall of 1867 to enter upon the study of medicine at the University of Berlin.

"We followed him to Europe in the spring of 1868, whilst our new homestead on Locust and Garrison avenues was being built.

"This we occupied soon after our return, in November, 1869.

"George returned in November, 1873. Then came those enjoyable vacations, in the summer of 1874 in Colorado, in 1876 in North Carolina and the Centennial in Philadelphia, in 1878 at Lake Superior. After this, the sad period of George's sickness (septicemia from an anatomical wound) in December, 1878, and his mother's death on the 29th of January, 1879.

"With this closed my life with her who made me happy, ennobled and strengthened me. Do we live on, and is there ever a reunion?"

This closes this short and very interesting autobiography, honest and candid as was the author. It gives the story of a life of love, perseverance, indomitable energy and final success, a model and exemplar for every member of the profession.

DR. ENGELMANN'S SCHOOLBOY DAYS.

His teacher's reports for the school years from 1821-25 are rather remarkable. At first, he does not seem to have taken much interest, as now and then we find such notes as "not without talent," "very fair," "excellent," "first-rate," "most excellent," etc. One note will strike every one as most characteristic, as in all his work he presented that most remarkable steadfastness and perseverance. Even so the boy seemed to show the features of the man. Among the continuous reports of excellent, we have the remarks of one of his teachers, "He might assume a more pleasant expression of countenance."

Remembering that earnest, thoughtful face of his, it will strike one as peculiarly true.

It is also remarkable how, in later reports, he was credited with that earnestness which made him master of everything he undertook in the various departments of natural sciences.

He came to America, driven by a somewhat adventurous spirit with the hope of following his favorite studies. Thus he spent some years roaming about the southern part of Illinois, studying the mineralogy and botany of that region, sending some valuable specimens to the museum of his native city.

His venturesome spirit was not satisfied with being in one locality,

Then came his trip to Arkansas, and, equipped with a good horse, gun, pistols and a large knife, a supply of paper and materials for preserving skins, he departed on his scientific tour through Arkansas and the western bank of the Mississippi. Upon this trip he had a large, heavy knife, made like a huge bowie-knife, which has accompanied him ever since upon all his botanical excursions, serving to dig out roots, to cut down saplings and vines.

Whilst resting one night in an Arkansas farm house, he was cleaning the blade which had served to dig out roots and some specimens. This rather stirred up the old trapper, who stood watching him. Finally, the backwoodsman could not longer conceal his annoyance, and tapping Dr. Engelmann on the shoulder, said, in the belief that it was a piece of bravado to draw him out: "I say, stranger, this is a mighty big knife, but I have got one as good, and if you like, we will just try knives." It was with some trouble that the man was pacified and made to understand that it was a scientific instrument and not an Arkansas tooth-pick.

From this trip he brought numerous valuable specimens, a part of which was lost swimming overflowing rivers, and was some time recovering from the swamp fever he had contracted in this southern excursion. He returned to St. Louis November, 1835, sick, worn out and penniless, and had to sell his horse and gun to enable him to pay the first month's rent of the little office he took at the corner of Second and Chestnut, then the heart of the city. St. Louis had then 8,000 inhabitants. A screen was made in part by a large stand in which he kept his drugs. In front of it was his office, in the rear the little bed-room. When in 1847 he removed to the corner of Elm and Fifth, his friends thought it was most injudicious that a physician should go so far out of the city. He came to the village of 8,000 inhabitants and lived to see it a metropolis of over 400,000. He always kept moving with the growth of the city. From Fifth and Elm streets, then a center, he finally removed to Garrison and Locust, then another centre of the present population, showing in this his usual foresight and prudence. There he died, honored and regretted by all, but not to be forgotten, for his work will live after him, and, in the eloquent words of Prof. Sargent, the western plains of his adopted land will still be bright with the yellow rays of the *Engelmannia*, the rarest of spruces named after him; the noble forests of this tree, so long as they cover the inaccessible slopes of the Rocky Mountains, will recall to the thoughts of men the memory of a pure, upright and laborious life."

A committee composed of Drs. Boisliniere, Ford and McPheeters, appointed by the St. Louis Obstetrical and Gynecological Society, June 19, 1884, on occasion of the death of Dr. Engelmann, reported as follows:

Resolved, That by the death of Dr. Geo. Engelmann, the St. Louis Gynecological and Obstetrical Society has lost one of its most honored members, as he was the pioneer of the science and art of obstetrics west of the Mississippi river, having been the first to practise and teach the use of the forceps, and carry for years afterward a large and successful obstetrical practice.

Resolved, That in his death the scientific world has lost one of its ablest instructors and contributors, and a most distinguished representative of true and practical science.

Resolved, That these resolutions be placed on a page of the Necrological Record of this society and a copy of them transmitted to his family.

The valuable contributions to botany, made by Dr. Engelmann are to be soon published in a separate volume, which will be of great value to the student of that branch of the natural sciences.

The Herbarium which he collected during many years of patient and scientific efforts is to be presented to Mr. Henry Shaw, his old friend. It is most valuable and extensive and will be placed for preservation in a secure room provided for by the generosity of Mr. Shaw, together with his microscopic drawings and lithographs of plants made by Dr. Engelmann himself, who, at an early age had learned the art of lithography in order to obtain and preserve correct representations of plants.

THE MASSACHUSETTS STATE MEDICAL SOCIETY held its hundred and third annual session in June. This society has a membership of more than fifteen hundred. At the late meeting the Society voted to admit women to membership.

THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL has again changed its editorial management. It is now conducted by ten associate editors, including some of the former staff, who have organized the New Orleans Medical Publishing Association. No names appear upon the cover and the journal will be conducted impersonally.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, February 19, 1884. DR. TUPPER in the chair.

LACERATION OF LONG TENDON OF BICEPS.

Dr. Todd.—MR. CHAIRMAN: I present to the society the right and left humerus taken from the body of a middle-aged negress. It will be seen that at the upper part of the bicipital groove there is much roughening due to exostoses, just where the tendon of the biceps muscle turns to go down the arm. Dr. J. W. White of Philadelphia, has recently written a brochure upon the subject of rupture of the tendon and belly of the biceps, which writing the members have also probably also read. The doctor explains at length the controversies that have arisen in respect to the possibility of such an accident as this rupture. Humphrey, whose work on osteology is so celebrated, in describing the ligaments of the shoulder joint, calls particular attention to the occasional rupture of the biceps tendon, which most frequently occurs about half an inch from its attachment to the scapula just about where the tendon is subjected to the most friction at the turn over the head of the humerus. Humphrey thinks that in such cases the tendon has been *worn through*, it having been previously softened by inflammation in course of chronic rheumatism, which was undoubtedly the history of the specimens before us. I have noted one other instance in the dissecting-room.

In both these specimens the process was a gradual one, as the divided tendons were adherent to the capsule of the joint; therefore there was no weakness of the arm through loss of attachment of the biceps.

I also exhibit the uterus taken from the same body which has undergone a complete fibroid degeneration; there seems literally no proper uterine tissue left.

Dr. Briggs.—I would like to ask Dr. Todd if he associates that condition with any constitutional vice.

Dr. Todd.—It is simply the result of rheumatism, I think. One can readily conceive that while the process was going on if the individual made a sudden exertion, should there not be too much pain the tendon might snap.

UTERINE FIBROIDS.

Dr. Schenck.—It is a singular fact that 60 per cent. of all colored women have fibroids; and it is a singular thing that there are more than double the number of fibroids in colored people than there are in white people. At post-mortems at the hospital we used to be almost disappointed if we did not find a fibroid in a colored woman; this is especially true when they have reached the age of 43 or 45.

Dr. Hardaway.—Negroes are subject to keloid you know.

Dr. Briggs.—Is white fibrous tissue concerned in keloid?

Dr. Hardaway.—It is connective tissue hypertrophy.

Dr. Prewitt.—Before we pass from the subject of the roughened humerus, I would like to ask what was the condition of the head of the bone in the glenoid fossa?

Dr. Todd.—With the exception of the exostosis there was no other trouble; the cartilages were intact.

Dr. G. A. Moses.—Was there any evidences of inflammation in the glenoid capsule?

Dr. Todd.—There was thickening of the capsule and the tendon was adherent at the opening of the capsule into the joint.

Dr. Prewitt.—Are the osteophytes marked?

Dr. Todd.—Very marked.

Dr. G. A. Moses.—The cervix uteri in this specimen is atrophied, and the entrance of the organ is so small that the smallest probe is scarcely able to pass, and I should say that the proper tissue of the uterus is not more than one-quarter its normal size, the whole body of the organ having passed into a mixed degenerated condition of fibroid and calcified tissue. The ovaries are atrophied on either side; the body of the uterus is composed of fibroid and calcareous tissue. I have seen a great many specimens of fibroid tumors, but I never seen one as marked as that. It is interesting to note this change and to know that the patient suffered from rheumatism for an unknown length of time. It would be interesting to know what effect the rheumatism may have had on this peculiar degeneration of the tissue.

Dr. Nelson.—Is it not a fact that negroes are more likely to suffer from these affections than white people?

Dr. Moses.—Yes, sir; they are very subject to them.

Dr. Todd.—I have noticed in the dissecting room that negro women are very frequently affected with fibroids.

Dr. G. A. Moses.—They are very much more subject to rheumatic affections than the whites.

Dr. Steele read a paper on Flat Foot. (Vid COURIER, March '84.)

Dr. Todd.—How long in this special case did you continue the treatment before you attained the result as indicated by the last diagram?

Dr. Steele.—Two months. The case is under treatment now.

Dr. Todd.—Does he still wear the apparatus?

Dr. Steele.—He wears a firm shoe and a pad; that is the only apparatus. He still keeps up the exercises several times a day. The beauty of this treatment is that a doctor in the country can adopt it without having to employ an instrument maker.

Dr. Tuholske.—The paper which Dr. Steele read is too important—of too much practical interest—to allow the subject to go by without further discussion, and for no other reason than that I speak about it. I have quite lately had under my charge two cases for treatment of this condition of flat foot that probably illustrate two points in connection with it quite well. The first was one of the ordinary flat foot, such as we would call flat foot in a negro, which is painless, because there is simply a sinking of the bones of the arch of the foot, but the superincumbent weight does not change the relationship existing between the articular surfaces. As long as the cartilage is not changed in its relationship, as long as there is nothing intervening, there is no pain; where there is no foreign material intervening we see, as in other joints, there is no complaint; the cartilage will readily support all the weight of the body and the patient does not complain. It is only when the relationship is changed that pain is experienced. Whenever flat foot exists for an indefinite length of time the relation between the individual bones is changed—the relation between the bones of the tarsus. If we carefully examine the inner margin of the flat foot we find, first, that the head of the astragalus, which under ordinary circumstances cannot be felt, is not only readily noticeable, but it presents pointedly; and furthermore, the tubercle of the scaphoid, which we can readily find under normal circumstances along the inner margin of the foot, is visible in a changed position; it is no more upon the inner margin, but has

turned so that the tubercle is situated below. There results this change of relationship first between the astragalus and the scaphoid; and when this change occurs there is pain. The pain that occurs is produced by the upper margin of the articular surface crowding against the internal lateral margin of the head of the astragalus; the inner margin of the foot is shortened and the outer margin of the foot becomes larger.

In the case that I saw sometime ago there was a great deal of trouble. I did not examine the case as closely as Dr. Steele did. The trouble was due to an injury of the tibialis anticus, which is inserted into the internal cuneiform bone and the base of the first metatarsal; a slight injury had taken place in the tibialis anticus which was overlooked at the time; but some time afterwards the patient commenced to complain of pain in the dorsum of the foot, along the inner margin; he complained of pain there, and there was tenderness on pressure. The patient called at my house and told me of the pain. I did not examine him very carefully, as I was not able to attend to practice. I told him to go home and go to bed and that in a day or two I would call and make another examination. I failed to do that, and Dr. Mudd saw the patient and treated him for several weeks, until I saw the patient again when I had gotten better; I saw the patient with Dr. Mudd, and we were then doubtful as to the diagnosis. For myself I thought it was probably of rheumatic character and that probably it was of some obscure syphilitic origin, and the patient was treated on some such idea; the joint was bared and plaster of Paris applied. He was thus treated for some weeks, the patient still suffering all that time. I then went East and Dr. Mudd continued to treat the patient. He suffered a great deal all the time. On my return I was again called to see the patient, and Dr. Gregory had seen the patient meanwhile with Dr. Mudd. He was suffering a great deal and there was really no improvement. After my return I was called to take charge of the case again, and I then got the history of the injury to the tibialis anticus, and I then remembered a case that I had read of that seemed to be a description of this very case. I then examined the foot and found that there was a dropping of the arch and I then came to the conclusion that I would apply the remedies that I had seen applied at Billroth's clinic: The splint was applied in the way that Dr. Steele has shown, was put on the sole of the shoe and within a few weeks the pa-

tient commenced to improve. After that I had them put on a strong steel arch under the foot, upon which he moved about without any suffering and pain. Afterwards I used electricity, the interrupted current, to the tibialis anticus, and injections of strychnine into the body of the muscle. The patient is still wearing this apparatus, it being now almost two years since it was first applied. He has not been paying the attention that he should have done to the local treatment such as Dr. Steele suggested.

The other case which I saw was that of a young clerk in some business house down town. He was a young man of 19 years of age, and is compelled to do a great deal of standing behind a counter. He had been troubled with what he supposed was rheumatism for a long time, and he came to be treated for that. When he entered the room I noticed that he came with a shambling walk; he seemed not to be able to raise the heel from the ground. I examined the foot and found that he was suffering from flat foot. I applied the treatment, and in a short time he was able to be about attending to his duties. It was only because I had made a mistake in the first case that I so readily recognized the cause of the trouble when I got this second case to treat.

Dr. Prewitt.—I was going to say that this condition of flat foot is very common. I have seen a great many cases. But I suspect that in the great proportion of these cases there is no pain, and the reason is that the bones do not lose their proper and normal relations to each other. There is no abnormal pressure brought to bear upon any part, as the doctor says the cartilage retains its proper position, and as long as this is the case—as long as the cartilage presses upon cartilage there is no trouble, but the ligaments naturally yield more or less to the pressure, so that the upper margins of the bones begin to press upon each other, and no doubt in many cases a certain amount of inflammation is set up which is to be gotten rid of by simply replacing the arch in many cases. The foot of course is to be kept quiet, and the inflammation is to be allowed to subside, but I think probably the reason that the negro does not suffer in the same way is because this is a common congenital condition, and consequently we do not find a distortion of the bones. I think Dr. Steele's paper is a very interesting and instructive one.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

SMALL-POX—INTERNATIONAL HEALTH EXHIBITION—SANITARY
CONFERENCES—QUARRELS IN THE ROYAL COLLEGES—
PATHOLOGY AT CAMBRIDGE—THOUGHT-READING—
HOSPITAL WASHING—MACKINTOSH—CEREBRAL
EMBOLISM.

LONDON, June, 1884.

Editor Courier.—A most severe epidemic of small-pox is now raging in London. The fatality up to the present time has been 23.9 per cent. In the last epidemic in 1881, the mortality did not exceed 16.4 per cent. There are at the time I write 1,057 small-pox patients under treatment in London, or the hospitals and hospital ships provided for their reception. It appears that the proportion of vaccinated persons taking the disease is increasing. This fact will greatly encourage the opponents of compulsory vaccination. The only other European country that enforces vaccination is Germany. In France and Belgium there is no law on the subject. The prevalence of the disease in those countries is therefore not surprising. After the Franco-German war, in 1870, there was an almost universal epidemic of small-pox throughout Europe, consequent upon the large number of the French who emigrated to different countries. In some of the Swiss cantons the law imposing compulsory vaccination has been repealed.

The International Health Exhibition at South Kensington is now in full swing. However remote the relationship may be between most of the exhibits and the subject they are intended to illustrate, the event has been turned to good account by holding in the Exhibition Buildings a series of conferences on subjects closely allied to the questions of health and prevention of disease. This month conferences will be held on:—(a) the Sanitary Arrange-

ments of the Metropolitan Poor, and the Improvement of the Sanitary Arrangements of Metropolitan Houses; (b) Domestic Sanitation in Rural Districts; (c) Industrial Diseases; (d) Spread of Infectious Diseases (j) by milk and (ij) by other agencies; (e) the Notification of Infectious Disease, its Importance and Difficulties and the Right and Duty of the State to Enforce it; (f) the Disposal of the Dead, and the subject of Cremation. Next month a consultation will be held on the Uses of Electricity in the Preservation of Health, and its Use in Medicine. A paper on the subject will be read by Dr. Stone, of St. Thomas' Hospital. Dr. Stone has already written upon the subject of the electrical resistance of the human body.

The subjects proposed for consideration at these conferences bring to mind a new duty that it is sought to impose upon the medical profession, that of notifying the sanitary authority of the occurrence of any case of infectious illness which may break out, in the practice of any medical man, among his patients. The duty of reporting these is to be imposed upon the medical man, in some cases without any remuneration, and at all times exposing him to the chance of establishing a very unpleasant relationship between himself and the family of his patient. The community and the state are again to reap a substantial advantage at the expense of the interests of the medical profession. It is, at present, the duty of a medical man to give a gratuitous certificate of the cause of death of all his patients; this certificate is copied by the Registrar of Deaths, the authorities of Somerset House and the clergy, and the copies sold at an established legal fee when required for the purpose of obtaining money from the insurance companies, probate of wills, and actions at law of all descriptions, securing at times the changing of hands of large sums of money. There is no limit to the number of copies of a medical man's certificate that may be sold by members of other professions, but for the original a medical man is by law prevented from making any charge. The willingness with which medical men, on compulsion, give certificates of death has been brought forward as an argument for obliging them to notify cases of infectious illness.

Internal quarrels are at present in progress between the Councils of the Royal Colleges of Physicians and Surgeons and their *alumni*. The Council of the Royal College of Surgeons has rejected the resolutions passed at the meeting of its fellows and

members held on March 24 last for the purpose of obtaining more influence in the management of the affairs of the College. War has now been declared, and the members of the College have been invited to join the fellows in their crusade against the monopoly of power held by the council. At the Royal College of Physicians the fellows have rejected the list of names proposed by the council for election to the rank of fellowship. Such a daring proceeding by the non-official fellows has seldom before been attempted, and those holding office are astonished, grieved, and enraged that such evidence of refractory spirit should be manifested by those whose chief duty, when called to a *comitia*, is to endorse the acts and opinions of those in authority. The cause of this small imbroglio is that the council have omitted to nominate for fellowship several distinguished young members connected with some of the metropolitan medical schools and hospitals. An early election to the fellowship is considered a high professional prize, although the young aspirant has to pay fifty guineas for the distinction. It appears that the council have purposely omitted from the list the names of these gentlemen that a majority of other fellows think ought to have been included.

The University of Cambridge has lately established a professorship of pathology, endowing the chair with an annual stipend of £800 (\$4,000) and students' fees. Dr. Charles S. Roy has been appointed the first professor. Dr. Roy has been the professor of pathology at the Brown Institute, an institution founded for the relief of diseases occurring in animals and for the purpose of investigating the causes of these diseases. Dr. Roy is a pure experimental pathologist and has been occupied with inquiries similar to those undertaken by Pasteur, Koch and other continental investigators. He has never been engaged in the practical teaching of pathology as followed at the hospitals. It is a question whether the University of Cambridge in medical matters should devote itself to the province of scientific research or engage actively in teaching the principles of medicine to students after the fashion of ordinary medical schools. If there is any place where experimental pathology should be encouraged it is certainly within the walls of an university, and Cambridge may be congratulated in obtaining the services of one eminently qualified to advance its reputation in that direction.

One of the most extraordinary phenomena of the present is the number of intelligent and well-educated people who believe in or

encourage "thought reading." A few days ago in London, Mr. W. Irving Bishop, the notorious thought reader, collected together at one of the leading hotels quite a party of eminent representatives of the church, politics, art, and literature, to witness his experiments in finding pins secreted by members of the company, deciphering the number of bank notes held in the hand of a chosen chairman which he himself had not seen, and other feats of the same kind. But one which excited the most interest was Mr. Bishop's endeavor to find some portable object within a mile of the place of meeting, a description of which was to be written down and the paper deposited in the hands of the chairman. Mr. Bishop then pulled a black silk bag over his head and face and attached himself by a copper wire to the person of the Rev. Dr. Harford, a canon of Westminster, who had named the article to be found, and then started off on his search, passing out into the street and dragging the clergyman behind through the crowd; at last he arrived at a building overlooking Dean's Yard, Westminster Abbey, where he secured a bust standing in one of the windows which the canon declared was the article he had thought of, and a description of which he had left in the hands of the chairman at the Westminster Palace Hotel. On the succeeding evening another aspirant to be considered a professor of the art of "thought reading" or what I believe he calls "muscle reading," viz., Mr. Stuart Cumberland, met a number of ladies and gentlemen by invitation at the Charing Cross Hotel to demonstrate his proficiency in tracing out the relation between muscle and brain. Among the company were the Persian minister, the Spanish minister, the Canadian High Commissioner, several members of Parliament, four or five clergymen, Madame Pauline Lucca (the great operatic singer), the Jewish rabbi, and several Fellows of the Royal Society. The chief event of the evening was the finding of a pin which had been secreted by the Rev. Dr. Holden, late head master of Queen Elizabeth's School, Ipswich, within a mile of Trafalgar Square. Mr. Cumberland after being blindfolded, attached himself by a black silk cord to the wrist of Dr. Holden, who had proved himself to be "a subject capable of giving nervous indications;" and after rushing wildly about the streets and Trafalgar Square dragging his subject after him, he succeeded amidst loud applause in finding the object of his search.

It seems incredible that men of the standing of Canon Harford and Dr. Holden can allow themselves to figure in such performances. To

see a portly dignitary of the Abbey Church, in Westminster, careering madly down the streets at the end of a wire pulled by a man with his head in a black bag; and a late senior classic of the University of Cambridge, and for some time a fellow of Trinity College, allowing himself to be exposed to the jeerings of a crowd in Trafalgar Square at the heels of a man to whom he was attached by a black silk cord are spectacles of a most unwonted description and not calculated to raise the respect due to profound learning. All these exhibitions of "spirit-rapping," "clairvoyance," and "thought-reading" have sooner or later been found to depend upon some form or other of trickery.

At the annual dinner at St. Bartholomew's Hospital, it was stated by the treasurer that the expense of washing had increased during the last ten years under the new nursing system from about £800 per annum to over £2,000. This fact was mentioned as a subject for congratulation. It should more properly be looked upon as an evidence of extravagance. Another large item in the increased expenditure of hospitals must be that incurred in the purchase of Mackintosh. The new trained nurses seemed to delight in Mackintosh. No operation is performed in the hospitals either in the operating theatre or the wards without the sheet under the patient being first covered by a sheet of this material. It is really most uncomfortable and cold to the patient and inconvenient to the operator, and insures most effectually the occurrence it is meant to avoid; it collects the blood in pools upon its surface and sooner or later conducts it with a run on to the clean sheets or garments of the patient where otherwise the blood would not have gone.

The medical societies have now discontinued their meetings until October. At the last meeting of the Royal Medical and Chirurgical Society, Dr. Sharkey, of St. Thomas' Hospital, reported an interesting case of embolism of the right middle cerebral artery, producing left hemiplegia and hemianesthesia. The patient survived the paralysis seven years, and at the post mortem examination it was found that a large portion of the right hemisphere had been absorbed.

E. V. A.

THE SCIENTIFIC AMERICAN offices have been removed to 361 Broadway, N. Y., cor. Franklin St.

COMMUNICATIONS.

CREAM OF TARTAR IN VARIOLA—CLAIM OF PRIORITY.

Editor of the Courier: I recently read that a distinguished English physician had discovered that bi-tartrate of potassa (cream of tartar) was almost a specific in the treatment of small-pox. So magical, indeed, were its effects that to a great extent this dreadful disease had been robbed of its terrors. Of course, in common with the more enlightened members of the profession, I utterly reject the claim of so-called specific remedies. But I am not called upon to discuss that question at present. I only desire to say that I was in advance of the distinguished gentleman by more than thirty years in making this discovery. In 1850, it was my misfortune to pass through an epidemic of small-pox and to treat nearly a hundred cases of the disease. I was quite a young physician and was living so remote from other physicians that I was compelled to depend upon my own unaided resources. Never having had any experience with this most loathsome disease, I naturally found my situation somewhat embarrassing. Most of the cases were of the confluent variety and violent in character, many of them occurring among the colored population.

At a very early period of the epidemic I became convinced that the only rational treatment was to keep the patient pleasantly cool by free ventilation and the judicious use of cooling remedies. Acting upon this conviction one of my earliest prescriptions was the following:

R Potassæ bi-tart.	-	-	-	-	-	-	3ij.
Magnes. sulphat.	-	-	-	-	-	-	ʒss.
Sp'ts. ether. nitric.	-	-	-	-	-	-	flʒiij.
Aquæ fontanæ	-	-	-	-	-	-	ʒivss.

M. Stir well and give a tablespoonful every three hours or oftener

This prescription was to be renewed as often as exhausted and continued throughout the attack, reducing if necessary the quantity of Epsom salts. This put together with an occasional anodyne, if required, and the free use of the milder emollient or oleaginous remedies by inunction constituted the treatment.

And now for the results. I had one fatal case, a child three years old, in whom the disease was complicated with worms; the pustules failed to fill and death apparently from blood poisoning was the result. Secondary fever occurred in very few of the cases and was not a prominent or dangerous symptom in any. In very few of the cases was there serious pitting, and in several it was the result of an uncontrollable desire to scratch in children. In some cases it became necessary to sew up their hands.

Fifteen years later, in 1865, I had an opportunity of again testing the value of the treatment; and though the cases were much fewer in number they were equally violent, and the result was equally favorable or more so, all the cases ending in recovery. These are the facts in the case. It is for you and the profession to decide whether I have made good my claim to priority in the discovery of the value of cream of tartar in the treatment of variola.

I have but a few words to add. At the time of which I write, viz., 1850, no work on "Practice" to which I had access even mentioned cream of tartar as a remedy for small-pox. Its virtues, such as they were, seemed to be entirely unknown. I am not aware that any of the later writers give it any prominence in connection with the disease under consideration. That it does exert a very decidedly beneficial influence must be conceded unless indeed it can be shown that effects in the cases I have cited were mere coincidences, first in 1850, and again in 1865. And stranger still, if these claims are fictitious that they should be reiterated again as late as 1883, by a distinguished English physician who lays claim to great distinction in consequence of the importance of the discovery. The truth of history and the claims of even-handed justice require that I should, however reluctantly, inform the gentleman and the profession that he was anticipated in that matter by more than a third of a century and the merit, be it much or little, belongs to a country practitioner of Missouri. Respectfully,

S. T. BASSETT, M. D.

Richmond, Mo., June 24, 1884.

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No. 3.

ORIGINAL ARTICLES.

ON THE RISE AND PROGRESS OF EPIDEMICS.

BY GEO. HOMAN, M. D., ST. LOUIS.

(Read before the St. Louis Medico-Chirurgical Society, July 22, 1884.)

WHEN the course of on-coming time shall have brought to the minds of men a knowledge of the forms and features, identities and belongings of the seeds of epidemic disease as fixed and definite as that now held regarding the seeds of animal and vegetable life, and to the attainment of which knowledge observation, analogy and experiment alike all promise and tend, doubtless in that fulness of time and attainment surprise will be expressed that a conviction and conclusion so reasonable and satisfying, and so fully in keeping with all the teachings of nature, should ever have been denied or seriously questioned. No doubt arises in the mind of an observer when viewing a recognized member of the animal or vegetable kingdom, however high or low its relative rank therein may be, that it had its beginning in a seed, cell or spore that was endowed with fertile properties by a progenitor; and, similarly, no reasonable doubt may exist that the wasting activity of developed infection is but the widen-

ing expression of forces or forms of life that may for a time lie dormant, and be then again in their season awakened.

Repeated observation and experience of the rise and fall, ebb and flow of diseases that have wide prevalence and power, long since led to the conviction in the minds of intelligent observers that their operations were no more exempt from the control of law than were other forces in nature whose workings and results are less alarming, and are manifested without inspiring the dread and panic that attends displays of pestilential power. This conviction, based upon observed and tested facts, that such exhibitions of destroying energy were dependent upon fixed and definite changes and evolutions in the forms and lives of specific seeds, or organisms, was logical, unavoidable, inexorable; and the process by which it was reached was the same in kind as that by which the astronomer foretold and located a planet, until then unknown, from otherwise unexplainable perturbations observed in the movements and behavior of other heavenly bodies; the circumstances justified no other conclusion, and the telescope, when properly pointed, made good the prophecy and calculation. The finding of the unknown planet was less a discovery than a demonstration of what was previously known must in the very nature of things exist, and the microscopical determination of certain entities, as causes of epidemical movements, was simply a triumphant confirmation of the just inferences of medical prescience and rational observation and acumen, this result being as necessary as that there should be a cause for every consequence and a parent for every offspring.

The processes and progress of epidemic development have their likeness and parallel in the beginnings and unfoldings of vegetable, if not animal, life, the organic causes of such manifestations having their preferred soil, or medium, and times of growth and seeding, each differing after its kind, but distinct withal in type and relationship, and in fruitfulness limited only by inherent vitality, and the kindliness of soil and season and surroundings upon which they happen to fall. In the interval between sowing and ripening they are exposed to adverse as well as to favoring influences, and that planting, whose earlier appearance gave promise of an abundant harvest, may have its later growth

thwarted and blighted through mischance, or untoward environment, and no ripened yield, infective in potency and purpose, be had from the earlier promise. The parable of the sower and the seed may illustrate somewhat the inception and behavior of a general infection, as well as convey a lesson in homilistics or husbandry:

“Behold a sower went forth to sow; and when he sowed, some seed fell by the wayside, and the fowls came and devoured them up: Some fell upon stony places, where they had not much earth; and when the sun was up, they were scorched; and because they had no root, they withered away. And some fell among thorns; and the thorns sprung up and choked them. But other fell into good ground, and brought forth fruit some an hundred-fold, some sixty-fold, some thirty-fold.”

When the seeds of a certain infection, which has in itself the power of increase and self-multiplication, fall broadcast upon the human population-soil of a community, race or nation, the results that follow are determined by a number of conditions, the chief ones being, as before intimated, the fecundity or vital efficiency of the seed itself, the fitness of the soil upon which it is sown, the favorableness of the season, and the circumstances attending its deposit and retention in soil suited to its nurture and development. Warmth and moisture with abundant light and air are the recognized accessaries of healthy growth in the higher forms of animal and vegetable life, but the prolific vigor of a population-infection is best attained where moist organic decay is found with decrease of light and a warm and stagnant atmosphere. This is an established fact as regards the active spreading diseases that are domiciled in, and affect temperate climates; and, moreover, is most eminently true of those having an alien habitancy. That the domestic scourges may be held in effectual check as regards the body of population, if it may not be quite possible to entirely eradicate them, cannot be denied. The soil from which they spring may be sterilized in various ways and degrees by unsparing scrutiny and cleanliness of earth, air and water; and their epidemic potency and infective vigor may be pauperized and weakened until their failing grasp shall include only here and there an individual, and no longer as before whole communities, races and peoples.

The typical spreading infections of to-day, which still exist in their primitive vigor, are of foreign birth and rearing; and of these, in pandemic purpose, dominion and power and disregard of geographical lines, cholera is the chiefest and most dreaded of man. Its onward march is in lines of latitude following the commercial pathways of man, while yellow fever is confined to limited longitudinal parallels, and its power fails and perishes in the presence of northern frosts.

Although it may be thought premature to attempt to declare all the ways and methods of cholera infection as it grows and ripens to epidemic fulness, it is yet certain that the mystery and dire confusion with which the terrified minds of men once surrounded this disease is gone forever, and that the story of its nature and epidemic rise and progress is one of comparative simplicity and clearness.

It possesses a fixed and certain entity as its leaven, or contagium, endowed with mobile and itinerant power and in its travels thrives best where cleanliness is least known and practised—such unwholesome conditions representing the good ground mentioned in the parable which yielded such abundant returns from the seed cast upon it; while those situations where purification and disinfection make barren a soil otherwise fitted for its reception and propagation, may stand for the places where the seed cast by the hand of the sower was destroyed, or failed to mature its perfected kind.

The genesis and evolution of a cholera epidemic in countries beyond its habitual range takes place somewhat as follows, account being taken of the material agencies mainly which tend to enlarge the area of morbid influence:

The importation of the poison having occurred by means of a person ill of the disease, or through clothing or other material charged with its viable seeds, and these being deposited in congenial soil, no effectual steps being taken to destroy both seeds and medium through ignorance, or a desire on the part of those affected to conceal the alarming truth, after a short period of germinative change a continually widening and radiating centre of active infection is created and maintained through the evacuations of the multiplying victims, the morbid interchange being.

apparently, not directly from person to person, but from person to medium and from medium to person again.

In the chain of evidence which science has forged from ascertained facts in the life history of the organisms which set in motion the train of phenomena and symptoms called cholera, only a single link remains unclosed, and that is concerning the precise shape, or transitional form, in which the principle of the disease is quiescent yet portable and least subject to unfavorable influences.

The ground necessary for the full development of the infection is the human intestine with alkaline contents; and when the invading germs have finally passed the barrier which a healthy stomach sets up against them by its acid secretion in which they are destroyed, they have reached their chosen field of action, and the changes wrought and symptoms that follow are due to their myriad generation and onslaught upon the vital forces through the enteric mucous tract. Their sojourn and multiplication in the lining of the bowel destroys its epithelial coating, and has the practical effect of a persistent irritant, of a continuing intestinal blister, an exhaustive and constant outflow of serum taking place which is most injurious in its effect upon the sufferer's vital powers. Whether or not, as some suppose, their presence in the bowel generates a certain poison that of itself shocks, depresses and kills, is of little practical moment.

It is a well ascertained fact, both by long extended observation and recent microscopical demonstration, that the active agent of cholera infection is speedily destroyed by acid exhalations in the air, or by liquids of similar reaction; and, although the question of the medical treatment of the disease is beside the purpose of this paper, it is of much interest to note how generally sound and intelligent were the views and deductions of empiricism, held by a majority of medical men for many years, and the practical value of the line of treatment followed by them, although its scientific rationale was unknown until microscopy gave the desired and long sought for clue.

In the light of recent investigations the established early practice of giving a mild purge to excite healthy action in the stomach and liver, followed by dilute mineral acids and prepa-

rations of opium to destroy the poison, and dull the sensibility of the system to the shock of the disease, with other accessory measures, is based on good etiological and pathological grounds; and the degree of success that attends any line of treatment will no doubt very greatly depend on the closeness with which the indications, as thus afforded, are understood and obeyed.

Success or failure in dealing with an intensifying infection, such as cholera, when under epidemic headway, depends so very greatly on the manner in which its individual cases are handled, and the care taken to instantly destroy the infection matter of the discharges and the filth medium of its reproduction, that the question as to whether the disease shall generally prevail in this country during this, or any other season, must be answered separately by every household, community and city in the land. That it will sooner or later pass our seaboard quarantine, howsoever strict for a time it may be, cannot in reason be doubted; access to the interior will then be easy, and in the unclean and unprepared places it will display its greatest activity, for certain it is that it attacks no body of people where the ground has not been made ready for its development and operations.

The history of the rise and progress of all epidemics fatal to mankind repeats the well-taught lesson that prevention is better than cure, and these teachings are being more and more heeded and obeyed, as the financial, not to say the moral or hygienic, instinct, in man sees clearly the immense disadvantage under which business interests labor in places that are not reasonably well fortified against pestilence, and where districts are exposed to repeated decimations by preventable disease. Moreover, the moral courage and steadiness of a people are strengthened and confirmed where cleanliness is both real and apparent, and such a population is less apt to stampede, when threatened with infection, and to have recourse to the doubtful expedient of flight, than one where an opposite condition prevails. That resolute courage should be maintained even amidst unfavorable surroundings is shown by the fact that fear disposes persons to attacks, especially of cholera, by suspending or disordering the healthy action of the stomach; and, besides, when dread and panic seize a population, everything save flight is forgotten; no precautions

are observed, existing foul conditions are increased many fold, and pestilence holds sway with increasing power until the field is exhausted, or changes in conditions of the weather bring it to an end, or the returning courage of the inhabitants enables them to arrest its course and spread.

The progress already made in epidemiology and that which inquisitive science now so surely promises, together with the results attained in preventive medicine, are due to the patient, unselfish labors of medical men; and these labors, it is gratifying to know, are being more and more recognized and valued through the growing enlightenment on the part of the general public. Indeed, the subjugation or extinction of infective spreading diseases depends so greatly on the degree of general intelligence found in a people or population, and in their quickening perception of conditions contraband of public health, that there is ground for the belief, in view of what has already been accomplished, that epidemics, as now known and feared, will some day be looked upon as lingering reminders of a negligent and blameworthy age; and that the ills, now so dreaded yet often invited, will be overcome altogether, and, perhaps, finally survive only in the annals or medical traditions of the human race.

SUMMER DIARRHEAS OF CHILDREN.

BY DR. H. C. SHUTTEE, WEST PLAINS, MO.

[*Read before the Howell Co. Medical Society.*]

THE subject of summer diarrheas of children is one pregnant with interest to the physician, being a fertile feeder of his exchequer and at the same time an immense sweller of his death list. Dr. Jacobi states that of all deaths during the first year of life forty per cent. are due to diseases of the digestive organs, and further, that "almost one-half of the infants dead before the end of the first year die before they are one month old." These statistics, however, are for the city of New York, and are inapplicable to the country, where fresh air is abundant, sanitary

conditions more favorable, and the infant mortality correspondingly less. At best, however, our infant mortality is great. This is in a great measure preventable. I am satisfied that fully three-fourths of all the diarrheal diseases among children which we are called upon to treat are brought about through the ignorance or carelessness of the parents or those having the child in charge.

As it is my desire to make this paper brief and practical, I shall give as briefly as possible the causes, post-mortem appearances, diagnosis, prognosis, and treatment of the different diarrheal diseases to which infancy and childhood are especially subject, eschewing altogether theoretical questions relative to their pathology, the *modus operandi* of their varied causes, as well as the *rationale* of treatment.

For practical purposes a division of infantile diarrhea may be made into *inflammatory* and *non-inflammatory*, the former embracing enteritis, colitis, cholera infantum, etc., and the latter those cases which are dependent upon indigestion, or at most mild congestion of the intestinal mucous membrane. I shall first consider the latter, or

NON-INFLAMMATORY DIARRHEA.

Causes.—The causes of this form of diarrhea appertain mainly to the amount and quality of food. The system of indiscriminate feeding to which our people are addicted is accountable for a large per centum of diarrheal disease, both simple and inflammatory. It is frequently the case that children are allowed to partake to satiety of food fit only for the adult, and indeed often of substances entirely unfit even for adult food: cakes, pork, bacon or ham, green fruits, nuts, etc., are often allowed the child *ad libitum*. Too great a quantity even of wholesome food will occasion gastro-enteric disturbance. Excessive heat, and likewise exposure to the chilly air of night, are efficient causes. Dentition is both a predisposing and exciting cause. Feebleness of the digestive organs from too rapid growth predisposes to diarrhea. Intestinal worms are also mentioned by authors as a causative agent. Abnormal conditions of the mother's milk, such as an excess of fat, salts, cheese, or other accidental admixtures may cause it. Fermentation of food in the alimentary canal is also

an important factor in the genesis of infantile diarrheal diseases.

The *anatomical appearances* after death are not such as would warrant any more definite appellation for this disease than simple diarrhea. Often there is even not congestion, only a vitiation of the intestinal fluids. Meigs and Pepper quoting Woodward on "camp diseases," say of the after-death appearances of the cases: "They reveal little that bears on the nature of the disease, except congestion of the intestinal vessels of varying intensity.

Symptoms.—There is usually some disturbance of temper, restlessness, and insomnia, all of which are more marked during the night, preceeding for a short time the definite onset of the attack. Sometimes there is only feebleness and languor. There is no fever. The appetite is diminished, the tongue moist and lightly coated of a whitish or yellowish-white color. In mild cases the stools are often feculent throughout the attack. In ordinary cases the stools become more frequent and copious, thinner, and often of an acrid and fetid odor. In severe cases they lose their feculent character, become still thinner, often quite watery, or mixed with mucus; often, too, there are green particles scattered through the discharges, and the whole may be of a decided greenish tinge, or they may assume a yellowish or brownish hue. Whitish curds of undigested milk, as well as other undigested food, are often seen. The number of stools varies greatly, from two to eight or ten or more in the twenty-four hours. The abdomen is seldom much distended, unless fermentative changes are going on in the intestinal contents, nor is it tender to the touch. There may, however, be griping pains. As the disease progresses, the child loses flesh, the countenance becomes pale, the eyes sunken, and death occurs from exhaustion. Cerebral symptoms arise in long-continued cases, simulating congestion of the brain, but being caused really by its antipode, anemia. The duration is from a day or two to a week or more, and relapses are frequent unless extreme caution be exercised in alimentation, etc.

The *prognosis* is as a general rule favorable. In children of feeble resisting power it may prove fatal. It may eventuate in one of the inflammatory diarrheas. If long continued it may

produce death by causing anemia of the brain—Marshall Hall's hydrocephaloid disease. I have said nothing as to the *diagnosis*, as this can be readily differentiated by the absence of fever, of tenderness of the abdomen, etc., from the inflammatory form.

Treatment.—Prophylactic measures are of the first importance, for by a proper regimen and attention to ordinary hygienic conditions, the disease may be reduced to the minimum. After the disease is once established dietetic treatment is of prime importance. The limits of this paper will not allow me to even approach the subject of infants' foods, which is a theme of sufficient importance to be entitled to the dignity of special treatment. Of course, good breast milk is the best food, and all substitutes should approximate it as nearly as possible.

As to the therapeutic managements, Meigs and Pepper, page 371, say: "The fewer drugs we can succeed with in the gastrointestinal complaints of infants and children, the better." Swollen gums should be lanced. If there is reason to believe that the intestinal tube contains irritating undigested matter, or acrid secretions of any character, the treatment should be begun by the administration of a laxative or purgative. Castor oil and laudanum is a favorite with many. Dr. West recommends, when the stools are watery and fecal, small doses of sulphate of magnesia combined with tincture of rhubarb, syrup of ginger and caraway water, to be followed, if necessary, by an astringent. These are numerous; crab's eyes, the preparations of chalk, sugar of lead, opium, in short, all the various vegetable and mineral astringents. A favorite prescription of mine is some good preparation of pepsin alternated with tannin. Aromatic sulph. acid combined, if there is any gastric irritability, with creosote or carbolic acid is excellent. Dr. Jno. S. Lynch, of Maryland, has used with remarkable success the fluid extract of *rubus procumbens*, and says: "It has an effect far surpassing tannic acid, and seems to act as a specific." Fluid extract of geranium is one of our most valuable astringents, having the advantage of a not unpleasant taste. Dr. Marchka, of Carlsbad, claims remarkable effects from the extract of calabar bean, its usefulness depending on its power to produce contraction of the muscular coat of the intestines, im-

peding the onward movement of their contents and lessening hyperemia. *Nux vomica* is a valuable remedy, and an excellent tonic during convalescence. From bismuth, though highly spoken of by most authorities, I have not had very good results. Opium is one of our most valuable remedies, but it must be used with caution in infants. In regard to the use of mercurials, authorities vary. When the tongue is coated, of a yellowish hue, when the liver and other secretory organs are inactive, calomel is an invaluable medicine. For the vomiting which is frequently present it is one of our best remedies, given in small and frequently repeated doses. When there are putrefactive changes taking place in the alimentary canal, calomel is probably our best remedy. Its inhibition on fermentation in the intestinal tube has been demonstrated by Dr. Wassilieff, of Germany, and others. Dr. Calleza, of Canada, recommends highly the salicylate of soda in fermentative diarrhea. Salicylate of bismuth is also being used in these cases. Pepsin with hydrochloric acid should be given when the digestive powers are feeble.

CHOLERA INFANTUM.

It is the custom with many physicians to designate all, or nearly all, diarrheal diseases in infancy cholera infantum, and instances are not wanting of practitioners applying the term to choleriform diarrhea in adults. The term should be restricted to those cases characterized by copious watery dejections, obstinate vomiting, great and rapid emaciation, profound prostration and collapse.

Symptoms.—The onset may be sudden, or it may have been preceded for a varying length of time by ordinary simple diarrhea. The first evacuations, when the onset is sudden, contain fecal matter; but they rapidly become very thin and watery, frequent and exhausting. Their odor is said to be peculiar, musty and offensive, but this I do not remember to have noted. Coincidentally with the diarrhea, or following soon after, there is extreme gastric irritability. Everything taken is rejected immediately or in a few moments, or there may be retching without vomiting; water is taken with great avidity, but is rejected almost immediately. The tongue is either clean or covered with a light

whitish or yellowish fur. The pulse is accelerated, and respiration soon becomes so, is irregular, often sighing. The internal temperature is always elevated, Smith stating that in ordinary cases the thermometer in the rectum records 105° , and in extreme cases 108° , though the surface of the body may be only warm, even cool. The number of evacuations varies from eight or ten to fifteen or twenty or more in the twenty-four hours; they may be frequent and smaller or seldom and larger. In unfavorable cases, after a time varying from less than twenty-four hours to two or three days, these symptoms terminate in a collapse. The pulse grows small, thready and rapid; the surface becomes cool; the countenance drawn; the blood inspissated, and the patient passes into a semi-conscious or comatose state. The vomiting usually ceases, but the diarrhea continues to the last. From this state the patient seldom recovers.

Causes.—These are the same as in ordinary diarrhea, frequently exaggerated. Meigs and Pepper call attention to the fact that the tendency to cholera infantum appears to be hereditary in some families. Baginsky, of Berlin, claims to have discovered the bacilli of cholera infantum both in the dejections and intestinal mucous membrane.

Post-Mortem Appearances.—These vary, but they are all essentially inflammatory. The stomachal and intestinal mucous membrane, one or both, may be softened; or the follicles of the intestinal mucous membrane may be alone involved; or again, there may be no abnormal appearances, in which latter case may not the copious serous discharges be due partly at least to vaso-motor paralysis? Meigs and Pepper claim that the enteric vaso-motor nerves are probably paralyzed, and indeed there are not wanting physicians of eminence who maintain that the pathology of this affection is essentially nervous.

The *diagnosis* is easy; indeed it cannot be mistaken for any other affection, unless it occur during the prevalence of epidemic cholera, when it is impossible to differentiate the one from the other. According to Roger, however, the temperature during collapse does not fall so low as in true cholera.

The *prognosis* is unfavorable in proportion to the severity of the symptoms; upon the whole, according to my experience, un-

favorable. It may end in recovery, death, or entero-colitis. I have seen the disease, on the one hand, arrested in a few hours, and, on the other, terminate fatally in twenty-four. So rapidly fatal is it sometimes, that the words of Shakespeare, by a slight paraphrasis, are not inapposite to this disease.

“ Whose effect

Holds such an enmity with blood of child;
That, swift as quicksilver, it courses through
The natural gates and alleys of the body;
And with a sudden vigor it doth posset
And curd, like eager droppings into milk.
The thin and wholesome blood.”

I know of no disease, unless it be membranous croup, that is better calculated to throw into strong vibration the sympathetic cords that have a residence in the breast of every true physician, and to impress indelibly upon his mind the fact that our science, at best, is but imperfect and uncertain, and that our best directed efforts often stand palsied at the rapid and unimpeded approach of the insatiate enemy of our race.

Treatment. The remedies appropriate for simple diarrhea are to be relied on in this affection, I have had the best results with small doses of opiates, tannin, creosote and stimulants. Opiates, however, require caution in their use. Very small doses of calomel dry on the tongue have often a good effect on the vomiting. Dr. Downs, of Philadelphia, has the best results for the vomiting with calomel gr. $\frac{1}{6}$ and bismuth gr. $\frac{3}{4}$ every hour or two; he also recommends for the serous discharges small doses of ergot, which he supposes influences the nerves presiding over the circulation. Fine scraped beef, scraping the beef with a dull knife and giving morsels the size of a shelled pea, has been highly spoken of for the vomiting and prostration. Dr. Gaunt, of New York, in the *American Journal of Medical Sciences*, for April, 1883, lauds very highly the compound tincture of iodine as a specific in nearly all kinds of vomiting, saying of it, “during my extensive employment of the drug, I have not met with a single failure in my own practice from the use of iodine to control vomiting.” I have used it frequently with marked success, but, like everything else, it often fails. Carbolic and hydrocyanic acid are valuable remedies to control vomiting.

Ice in small quantities is good. Dr. Jacobi, however, claims that ice increases the peristaltic action of the intestines, and should not be used. Water I have always allowed sparingly, but hereafter I am inclined to allow an abundance; no matter if it is rejected in a short time, some of it will be absorbed to supply the loss in the serous discharges. Alcoholic stimulants are advantageous in all cases. Warm sponging or bathing, if the surface be hot or dry, is soothing. As collapse approaches, stimulants must be increased. Dr. Jacobi recommends for collapse camphor, musk and brandy in large doses. From hypodermic injections of morphia I have had no encouraging results. As soon as vomiting is arrested, plenty of easily digested nourishment should be administered.

INFLAMMATORY DIARRHEA.

Causes. These are the same as those appertaining to the other forms of diarrhea already treated of.

The *anatomical appearances* are those of inflammation, their seat being in some part of the intestinal canal, the small intestines or colon or both. The follicles of the intestines are involved, and Peyer's patches are often congested and tumefied.

Symptoms. The onset may be sudden, or the disease may have been preceded for a few days by ordinary diarrhea or by cholera infantum. The child is fretful; it has fever, the temperature varying from 101° to 102° in mild cases, to 105° , 106° , or 107° in grave ones; there is anorexia, often nausea and vomiting; the tongue in acute cases is red at the edge and tip, while the central part may be either clean or coated whitish or yellowish; there is pain in the bowels upon pressure; tormina and tenesmus are often present; and the countenance of the child indicates grave sickness. The number of stools varies, according to the severity of the case, from six or eight to twenty-five or more in the twenty-four hours. They may be semi-fluid or quite watery and acid or neutral. Their color is greenish, yellowish, or brownish, or all these colors may be variously intermixed. They are often lenteric, containing particles of undigested casein or other alimentary substances. Occasionally they contain a little blood. The abdomen is always tender to the touch, but as a general thing, unless there be fermentation of the intestinal con-

tents, not very much distended, the appearance of distention being dependent upon the muscular effort made by the child to resist the hand of the physician. (Bouchut). The disease may become chronic, taxing severely the patience of both parents and physician, and obstinately resisting every dietetic and therapeutic effort for its relief. These chronic cases are sometimes remittent in character; the patient improves for a time, then gets worse again. I have seen cases where it lasted several months, reducing the poor little sufferer to a mere skeleton, and it sometimes lasts a year or more.

In the *diagnosis* there cannot easily be an error.

The *prognosis* in mild cases is favorable; in severe cases it is unfavorable, though I have seen the very worst cases recover. I recall a case of several months' duration, in which the stools occurred oftener than once an hour for several days, with unconsciousness and apparent collapse, where the patient, a boy æt. two years, made a slow but sure recovery.

Treatment. I shall confine my remarks to the treatment of the actual attack, avoiding altogether prophylaxis. All that has been said relative to the treatment of the other forms of diarrhea is equally applicable to this form. If the attack occur suddenly, and is dependent upon irritating matter in the bowels, a purgative is indicated for its removal, followed by opiates with other astringents. Mild cases frequently require nothing more than attention to diet, warm baths, and mild astringents. Severe cases tax to extremity our therapeutic resources. If the fever is high and the surface hot, cold applications to the chest and abdomen, or cold baths, are highly beneficial. Dr. H. C. Wood is an earnest advocate of cold baths in this affection. Frequent sponging with tepid water or warm baths are also useful. Under these circumstances a cooling diaphoretic, combined or not, according to indications, with aconite, is good. Dr. Cousin, of France, claims to have had excellent results from oxide of zinc, even after all other remedies had failed, combined with bicarbonate of soda, which causes it to be more readily tolerated. Ringer recommends doses of $\frac{1}{100}$ gr. corrosive sublimate. Spice poultices to the abdomen are highly spoken of by some. Blisters are useless. The mineral acids, especially sulphuric, are good.

Salicylate of calcium is lauded by Dr. Wm. C. Dixon, of Philadelphia. From small doses of calomel I have frequently had excellent results. Flint says: "There are no indications for mercury except as a remedy for vomiting and an occasional laxative remedy, the convenience of its administration being perhaps its chief recommendation in cases of young children." Opium is our most valuable remedy, but its use requires caution. Pepsin may be given in all cases, as it cannot possibly do harm even if it fails to do good. After the acute symptoms have subsided quinine is a good tonic, and as an anti-pyretic it is invaluable. Alcoholics are indicated as the disease progresses. Injections I have not found of much benefit, as they are seldom retained. Irrigation of the large intestine, according to the method of Monti, of Vienna, is described by Dr. Dulles, of Philadelphia, in the *Medical News*, of August 19, 1882: "The patient being placed on the side, or back, or with the belly downwards, and the pelvis a little elevated, a large, moderately flexible catheter is inserted into the rectum. To this is attached, by a tube, a reservoir of water, the length of which can be varied as may be required.

"The water is now allowed to flow from a height of about two feet until the rectum is distended; meanwhile the end of the catheter in the rectum is pressed gently but steadily upward toward the left iliac fossa. Very soon it will be found that the water has opened out the folds of the bowel and straightened the curves so that the tube finds its way beyond the sigmoid flexure and into the descending colon. Unless the operator be very unskillful it may now be pushed gently on, the flow of water continuing without interruption, until it reaches the left hypochondrium, where the transverse colon becomes the descending. The flow of water is now to be continued until the whole colon, all the way to the cecum, has been gently distended; the operator assuring himself of this by the amount of fluid used, and by palpation and percussion. The tube is now withdrawn. The fluid may begin to come away immediately, but it sometimes remains for an hour or more." Cool water is used. Dr. Dulles thinks very highly of this treatment, and gives the case of an infant a few months old screaming and struggling with the pains

of acute colitis," who became quiet and went to sleep before the injection was completed.

I have essayed this method in a few cases, but the resistance of the patient was always so great that the water was expelled as fast as it was injected, so that I found it impossible to pass the catheter beyond the sigmoid flexure.

Since writing the above I have received the following from Dr. Dulles.

"In reply to your inquiry in regard to the difficulty of carrying out the irrigation of the colon in resisting children, I can only say that I have always been able to effect the object with patience and gentleness. The buttocks must sometimes be held together, and it is well also to place the child with the face up—not down. In the latter position everything is against the operation. With the child on its back, I have found it easier to do what I wanted than with the weight of the body resting on the abdomen."

THE RELATION OF THE GENERAL MEDICAL PRACTITIONER TO INSANITY.

BY G. C. CATLETT, M. D., ST. JOSEPH.

[*Read before the Missouri State Medical Association, May, 1884.*]

MAY not the daily increasing importance of this subject justly claim your attention for a very brief time? And lest you should prejudge this essay to be tediously long and correspondingly dull, let me assure you that even an important elaboration of the subject shall yield to brevity of expression, not on account of the unimportance of the subject, but because elaborate and exhaustive essays are only exceptionally well received, and listened to by medical associations where the rule exists to read essays in general session. Being wholly in sympathy with the profession, most of whom assemble in the associations to interchange opinions upon the practical work of their daily life, and to gather the gems from the crucible of experience as may

be detailed in the narration of cases and evolved in the discussion of subjects by each other, I, therefore, will not trespass on the limits of a mere suggestive essay.

On account of the great number of insane now in the United States and the constant and progressive increase of insanity, this subject demands to be taught as a most important and essential elementary and fundamental branch of medical education by every medical college that assumes to teach the science and art of medicine.

For the same pertinent reasons the general practitioner, from the frequent demands upon his knowledge in the diagnosis of insanity, and upon his skill in its treatment and prevention can no longer neglect its study and investigation. The responsibility he assumes as a physician demands that he possess the average amount of scientific knowledge and professional skill to properly treat all forms of disease that may be intrusted to him.

In order that a more exact and definite view of the increase of insanity may be obtained, it will be only necessary to refer to the information furnished by Dr. Foster Pratte in his intelligent discussion of the question presented in an essay, namely—"A Study of the Tenth Census." He reminds us of the inaccuracy of the census in relation to the defective classes, but concludes by saying, "However inaccurate the census tables of the defective classes prior to 1880 may have been, there is enough of other results admitted to be correct in the census of 1850, '60 and '70 to furnish important and fairly reliable factors in the problem herein discussed, which will aid in its solution and help to guide us to practical and important conclusions."

For the purpose of showing the increase of insanity it is only necessary to avail ourselves of Dr. Pratte's labor in comparing the census returns. Beginning with the year 1850 the population of the United States as given was 23,191,000.

The total number returned insane by the census of this year was 15,610.

In 1860 the population of the United States was 31,443,000. The total number of insane then in the United States as reported was 23,999.

In 1870 the total population as reported was 38,558,000. The

aggregate insane as reported in the United States was 37, 432.

The last census, from 1870 to 1880, the population is reported to be 50,155,000. The aggregate number of insane as reported in 1880 was 91,997.

Dr. Pratte rightly suggests that the greatly increased aggregate number of insane reported by the last census returns is, no doubt, largely augmented by the greater care and accuracy in the census work. Missouri is reported to furnish to this aggregate insane population of the United States 3,310 insane. The last census reports 80,000 physicians in the United States in round numbers. There are 92,000 insane in the United States, making an average of one and one-fourth insane patients to each physician.

Eliminating the difficulties surrounding the obtaining of entirely reliable census reports upon this subject more than relates to any other subject reported upon, for obvious reasons, and also making full allowance for inaccuracies from all other causes, there still remain the startling figures above presented, showing the number of persons in the United States who are deprived of their reason.

These numerals representing unrecorded suffering, and unfathomable degeneracy, appeal with constant and rapidly increasing numbers to the science and art of medicine, not only for relief, but for the exercise of their boasted knowledge to preserve, as far as the resources of advancing preventive science have the power, sound minds in sound bodies, thus aiding in their restoration to the nation and its endowment with their pristine unexcelled physical strength and mental integrity and energy.

The chief causes of insanity are admitted to be largely controllable, and to be the result of the so-called higher social environments, that constantly, if not necessarily, have been the malign successors of nations and peoples who have forsaken the invigorating, healthful, peace abiding, life of the citizen of the country, and have massed themselves in densely crowded cities or in over-crowded countries, by which the struggle for existence is intensified and the competitive efforts for social and political supremacy, and the constant strain of both the body and mind to accumulate wealth, and secure influence and power. These are the general causes briefly stated that originate

the almost innumerable vicious customs, habits, feelings, propensities, physical and mental inclinations, and indulgences that with unerring certainty destroy both body and mind, either in the person of the individual given over to excesses, or more unfortunately in the innocent and unoffending descendants. It is in this sphere of work that the general practitioner of medicine, or more especially the family physician, can exercise a most benign, humane and potent influence, in timely recognizing the danger that his clients are ignorantly bringing upon themselves, and if he commands the influence that a cultured and conscientious physician should have, his warnings will be heeded and the dangers escaped.

If it be true that necessity or the demands of the occasion, the period, or age will invariably produce the great mind or the invention to fulfill the pending demands, we may conclude that the many recent works and essays recently written by Mitchell, Beard, Hamilton, Hammond, Seguin and others upon the subject of neurasthenia or nervous prostration, or, as Beard designates it, American nervousness, are the legitimate offspring of the existence of neurotic disorders in the United States to an alarming and constantly increasing extent. I do not wish to place an impeding straw in the way of any physician's properly estimating the importance or value and necessity for a thorough study of the etiology, pathology and treatment of mental and nervous diseases, but it is well not to yield your complete credence to all that has been too confidently asserted in the spirit of revelation to a select and chosen few, who, by the guidance of the star of science have had revealed to them profound knowledge upon an old subject under a new name. In truth, some of the writers on this subject are so enthusiastic, they appear to don the role of enterprise, and seek to ride, if not to control the rapidly spreading neural wave. Science is rarely advanced except by the imperturbability of reason and the inflexibility of ascertained truth.

In this merely suggestive essay I can only bring to your notice briefly the special causes that are held to be the chief factors in the production of insanity, in order that you, as general practitioners, may more fully realize the real relation you bear to this

vital question; for just in proportion to your capability of early recognizing an operating or acting cause in an individual case, and to your ability to remove it, will be your capacity to arrest the development of insanity.

There are no diseases within my knowledge the causes of which are as well understood and as easily ascertainable, and that are more preventable than are most of the causes that are generally recognized as the chief factors initiating mental disorders. It is a self-evident proposition that in order to successfully contend with, or combat an enemy, a knowledge of his person, his character, his artifices are all absolutely necessary. So it is none the less necessary that the physician, by study and observation should familiarize himself with the causes operating upon the system tending to disorder the nervous and brain functions in order that he may be capable of diverting them, and of preventing their effects. Most of the exciting causes, as will hereafter be seen, arousing predisposing causes (as heredity) into activity or operating upon an organism free from inherited or acquired predisposition, are amenable to control, and are subject to well ordered and directed antagonizing influences.

The exciting causes operate in insidious, and in multiform ways that it is the peculiar province of the general practitioner, or the family physician, to antagonize and combat; and it is in his power to successfully accomplish this. This I unhesitatingly assert to be the main hope of arresting the great increase of insanity with all the attendant complications and evils that are pressing the denser populations of the older world and of our own states for some practical solution and means of escape.

It may be stated as a broad and general proposition that any cause, either predisposing or exciting, acting with sufficient energy to produce either active bodily disease or a state of lowered and depressed functional vitality, tends to the production of neuro-psychical disorders directly in the individual subjected to their influence or in his offspring.

Little more than to enumerate the chief individual causes that produce insanity can be now brought to your attention, viz., hereditary tendency, organic disease, for example, Bright's disease of the kidneys or valvular disease of the heart, and the so-called

functional diseases (which I understand to mean, a general systemic super-impressibility, and instability, associated with excessive neuro-psychical excitability.) sexual abuse, excessive reproduction, abuse of intoxicating drinks, mechanical induction of abortion, overtaxing the mind and nervous system in pursuing exciting commercial and political avocations, religious excitement, the struggle with poverty to support and educate large families beyond their pecuniary ability and above their social condition, misdirected and too early education, all the vices originating in the existing social customs and environments tending to disorder and enfeeble the body, to create vices of constitution, to originate and perpetuate destructive appetites and passions, to create an excitable, unstable, feeble, mental and nervous organization.

The family physician possessed of the knowledge of the existence of a hereditary tendency in families or persons committed to his professional care, may by guarding such persons through the several critical periods of life, and so far as possible assisting them to avoid all exciting causes which tend to arouse the hereditary or predisposing causes, preserve in individuals and even in whole families the integrity of their intellects.

The physician's duties may properly extend further in this direction. Where heredity is positively established in the history of a family, he should inform and warn them of the danger of perpetuating the tendency to mental defects by inter-marrying with like defective individuals or with neurotics or with those having other hereditary constitutional defects.

In the medical supervision and treatment of persons of insane or neurotic temperament, when afflicted with organic diseases *e. g.* Bright's disease or cardiac affections, the physician may, by protecting the mind and nervous system from incidental or existing causes, prevent an explosion of insanity.

Sexual abuse and overtaxing the reproductive organs are two causes not generally sufficiently understood as being potent and increasingly active factors in the production of insanity. They are causes, too, surrounded with the most difficult and delicate problems that the profession have to deal with; but there is no other person whose attitude toward these persons, and whose moral

and professional qualifications so adapt to the performance of these duties as the conscientious, qualified family physician with a profound consciousness of the importance and magnitude of the subject and with a discriminating judgment to indicate the manner and spirit of imparting proper information and timely warnings in relation to these pressing and serious questions; much, very much is in the power of the physician to do.

Forced or mechanical abortion, is the blackest, darkest, most detestable, and execrable curse that can pollute the morals and degrade and destroy the mind and bodies of any nation, be they Christian or heathen. The historian states that the Roman Empire survived; contending against all the combined curses and evils to which that people was subjected, and only was subjugated and yielded up its power, its glory, and its dominion, when the destructive evils came attendant upon the women of the empire becoming abortionists, infanticides and harlots. May physicians, Christians, philanthropists and statesmen of all nations, individually and collectively, see to it that Roman history is not repeated.

Another fruitful cause of insanity is misdirected, too early and improper education. For a third of a century the restless and aggressive spirit of our country, has pursued with crude and irrational enterprise the idea of education of every child; male or female, weak-bodied or strong-bodied, feeble-minded or strong-minded all must be instructed alike, in every branch of study. All must be subjected to the same system of discipline without taking into consideration the individual's innate adaptability and mental aptitude and physical capacity to acquire the same diversity and quantity of education.

Even the physically and mentally strongest children are taxed with a variety of studies that mature and fully developed constitutions would not be equal to; and when no discrimination is made either in the mental or physical endowments of the children as to the requirements of study, is it surprising that so many break down before maturity, and those who arrive at adult life do so with dulled and blunted intellects, irritable, excitable, over sensitive nervous systems, and general system enfeebled, incapacitating them for either mental or physical

work or enjoyment and incapacitating them to perpetuate healthy vigorous progeny capable of maintaining the struggle of life. This subject has been so often and well presented lately that I only desire to suggest it to the general practitioner as one of the predisposing causes of mental disorder that especially claim his attention.

The many unsanitary causes and diversified active influences associated with our present social system, operating to destroy both mind and body, must be remedied by the diffusion of a knowledge of the consequences of living in constant violation of the laws of our organism. The trusted general practitioner is most appropriately looked to for this important information; and also is he the hope to point out the way of escape from the perils and dangers already incurred by the operations of the causes enumerated.

The general practitioner should likewise be skilled in the diagnosis and treatment of insanity. He should be able to recognize the very earliest and obscurest symptoms of mental disorders and promptly and efficiently to minister to the unsteady oscillating intellect; thus early recognizing the dangers and promptly applying the remedial means he will be able in many instances to arrest the disorder and preserve the mind from the oblivious darkness of permanent intellectual obliteration. There are no diseases in which the early recognition of the premonitory symptoms and the prompt resort to efficient treatment will accomplish as much permanent good as in mental derangement. So the responsibility peculiarly devolves upon the family physician to qualify himself to meet the demand that may be made upon him at any moment to apply his remedies to counteract the cause or causes that are fast inflicting permanent injury on the delicate cerebral tissues and cells for which, when destructively injured, there is no hope for restoration of either structure or function. This brings us briefly to consider the importance of students of medicine being educated in psychiatry, or diseases of the mind, as thoroughly as they are in any other department of medicine or surgery.

It marks a notable progression in the scientific medical history of the last decade that more actual advance in the development

of psychical and neural knowledge has been accomplished within that period than in many preceding similar periods. In truth there was greater necessity, as there was greater room for the study, the investigation and development of knowledge in relation to the anatomy, physiology, pathology and treatment of the cerebro-nervous system than of any other portion of our organism.

Amid all the meteoric existences of the various medical theories that have in succession swayed and dominated the medical mind during the past centuries, the neuro-psychical system escaped alike the distinction of being made to dominate over the healthy functions or abnormal actions, and also likewise the honor of an ephemeral theoretical precedence. It is no less strange therefore that these important structures and functions have not only escaped inclusion in the prominent theories and speculations of the speculative and theoretical medical minds than that profound and practical thinkers have, until comparatively recently, not bestowed the attention upon them that their vital importance demanded.

The pathology and treatment of insanity occupied no place in the curriculum of any European or American school half a century ago. Indeed it is of very recent date that this subject has been made a part of the curriculum in only a few of the larger schools, and the subject holds a subordinate place in them. View the announcements of both the colleges and the post-graduate schools. Professors and lecturers are multiplied so as to include the teaching of physiology, pathology and treatment of almost every separate structure and function, and the treatment of every common and uncommon medical and surgical disease or disorder except that of insanity. In the face of the not altogether unjust assertion that a neurotic temperament has been developed by Americans, which is but the basis of insane temperaments, and in the face of 92,000 insane persons in the United States, and the largely greater number of idiotics and defectives, and the rapidly progressive increase of these classes, and the millions they are costing the states for their support, the medical profession, both as teachers and practitioners, have failed to meet the demands made upon them by the rapid increase of these most grievous of all maladies.

The time has already arrived when the teacher, the student of medicine and the physician must alike become wise and skilful in this department of the science and art of medicine. The general profession can no longer evade the responsibility of the professional care of this class by consigning them to the custody of the inadequate asylums and to the few physicians who devote all their time to the investigation and treatment of insanity.

In opinion I am a limited specialist in all things; that is, I think before a physician can be a scientific, practical specialist in any department he must first be thoroughly educated in general medicine and surgery, and then have that education vitalized and crystallized by practical knowledge gained from clinical experience.

The influence of the prevailing specialisms has a tendency to impress the medical public that the knowledge and skill of the specialist partakes somewhat of a revelation manifested only through certain individuals endowed with an especial adaptability or genius for the acquisition of knowledge and the exercise of skill in a particular department, a most injurious and fallacious conclusion. The solution lies nearer home to every physician. Labor and concentration of the faculties on one subject is the solution of the problem.

Mr. Harris in a recent work well says that insanity is the saddest and most terrible of all diseases, the most pitiable and helpless of all the states and forms of human helplessness, and yet it is a condition to which all men are liable, and into which any man may at any time fall with or without premonition. Not only does it provoke the compassion of the philanthropist, but it appeals to and tasks the highest medical skill; it demands and exhausts all the resources of legislative wisdom.

In its relation to crime it presents the darkest and one of the most mysterious problems of medical jurisprudence. In connection with the poor it imperatively calls upon the states for care and protection.

No other disorder that man is liable to can approximate it in disastrous results to the human race.

Insanity is justly considered the greatest calamity that can

befall man. Such a calamity is the derangement of intellect and the loss of reason in him that it sinks him at once to the level of the lower animals. It deprives him of that endowment of his nature that gives him dominion over the lower animated world and many of the potent energies and forces that surround him. It degrades him from the high and divine nature and likeness of his Maker. How then can your energies be devoted to a more noble purpose than that of preserving a sound mind in a sound body?

PASTEUR'S WORKSHOP.—According to the biography of Pasteur just published, the workshop of the eminent scientist would be far from an attractive place for nervous people. Aside from the great variety of animals collected for experiments, far more unpleasant treasures enter into his collection than are found by curiosity hunters in other places. From all parts of France come hampers containing fowls and game defunct with mysterious and baffling diseases; close by are the remains of a pig which fever rapidly carried off. This fragment of a lung is from a cow dead of pneumonia. Every now and then Pasteur receives from some far-off yellow fever country vials of black vomit; tubes of diseased blood await analysis, and in special stores bottles like bladders inclose millions upon millions of microbes living and multiplying, retaining such virulence that a pin-prick into one would convey death to any man. Cheerful place! We prefer meeting the proprietor out of office hours!

IDIOSYNCRASIES.—Often what we call idiosyncrasies are the workings of a universal principle acting exceptionally in consequence of the absence of certain modifying influences—a principle underlying a thousand acts, unsuspected or unrecognized until exposed by the removal of its ordinary safeguards.—*Influence of the Mind upon the Body*, p. 114.

THE NATIONAL DRUGGIST is the new name of the journal which has so rapidly gained an influential position under the name of the "St. Louis Druggist." May the journal prosper under this new title even more abundantly than it has already done under the old.

CASES FROM PRACTICE.

TRAUMATIC APHASIA RELIEVED BY TREPHINING.

BY B. BRIBACH, M. D., SOUTH ST. LOUIS.

Wilhelmina Müller, aged 8, a strong, well developed girl, was brought to my office June 28, suffering with compound fracture of the skull. She had been kicked by a mule about an hour previously, was stunned for a minute or two, and then walked toward her father's farm, when she was hurriedly put on a wagon and brought to my place.

The fracture was situated above and a little anterior to the left temporal region, beginning at the vertical portion of the frontal bone, crossing the coronal suture near the formation of the upper and middle portion of the anterior border of the frontal bone, and extending in a curved line backwards and downwards toward the temporal ridge. The fracture was above two inches long, its lower convex part being markedly depressed. There were no symptoms of concussion of the brain; the girl was too much alarmed and excited to admit of an exact search for possible functional derangements; but there certainly was no paralysis.

The lower flaps of the scalp and the cut tendon of the occipitofrontalis were firmly lodged between the fragments of the fractured bone, so that I found it necessary to give chloroform to disengage them. In the absence of symptoms of depression I cleaned and dressed the wound, closing up the soft parts by wire sutures.

After the girl recovered from the chloroform narcosis, it was found that she could not speak. She was evidently anxious to say something without being able to do so, and finally made known by signs that she wanted water. For over half an hour I tried unsuccessfully to elicit some words from her. The father remembered then that she had not spoken an intelligible word since the accident happened.

On seeing the child the following day I found her without any symptoms of compression excepting aphasia. The only sound she could utter was a poorly articulated word sounding like "coffee," by which she would make known all her wants. Her pulse, respiration and general condition were good, the facial expression more than usually intelligent.

The aphasia appeared to be plainly due to pressure, and I proceeded to trephine and elevate the depressed bone. The dura mater was uninjured, and the inner table of the skull free from spicula as far as I could safely pass the probe. To my great satisfaction the little patient began to speak again the same evening, and by next day had recovered her use of language. The case made a very favorable progress without any febrile reaction at any time, and the girl is now up and about with the wound almost entirely closed by granulations.

In my judgment the parts of the brain impinged upon were the third and ascending frontal and the ascending parietal convolutions of the left hemisphere.

REPORT OF CASE OF STRICTURE OF URETHRA TREATED BY GRADUAL DILATATION.

BY L. T. HALL, M. D.

[*Read before the S. E. Missouri Medical Association.*]

In September, 1881, I was called to a distance of twenty miles to see a lad who had received severe injuries by the fall of a horse, while riding. The accident had occurred on the preceding day to the call, and the neighboring physician, who saw the patient shortly after the injury, already suffering from retention of urine, had found it impossible to empty the bladder, although he claimed to have introduced the catheter several times. The instrument, he said, was so "clogged" with blood the water would not flow through it. I inferred at once that the catheter had been passed through a rent in the urethra instead of into the bladder, which I found to

be the case upon examination, and it still remains a question in my mind whether the laceration was the result of the fall, or of the attempt to use the catheter, which was well calculated to inflict such a wound on account of a hole worn in its point immediately on the under surface.

By supporting the urethra at the point of injury, with the finger introduced into the rectum, after a little delay I succeeded in emptying the bladder, now distended to its utmost capacity. After a day or so I was called again to repeat this operation, when I saw no more of the boy until March, 1883, eighteen months after the injury was received, when he came to me for treatment for stricture of the urethra. For months he had been living a miserable existence. Passing from retention to incontinence, he went about the premises with a gourd lashed to his loins to receive the urine. Wasted and haggard almost to an extreme, he presented an object of pity.

Upon examination I found the urethral canal so narrowed at the seat of stricture, the beginning of the membranous portion, as to thwart all attempts to pass any instrument in my possession.

Procuring others, after patient and persevering efforts, I succeeded in establishing the route, and, gradually passing from smaller to larger instruments, after some weeks in restoring the normal calibre of the canal.

When the stricture was sufficiently dilated to allow the passage of a No. 3 catheter, I was somewhat puzzled at being unable to get any water even after the bladder began to retain its contents for a short time. I afterwards ascertained this was due to the presence in the bladder of a quantity of broken down tissues, mucus, etc., entirely obstructing the catheter. When the canal was fully dilated and the bladder cleared of this *debris*, I realized the happiest effect and prompt relief to the condition of chronic cystitis remaining, from the use of injections of a mild solution of nitrate of silver, four or five grains to the ounce, only having to repeat it two or three times.

The sound was used at gradually lengthening intervals, and, indeed, ought still to be occasionally used, but the boy insists he is well, and, living at a considerable distance, has discontinued his visits to my office.

When last seen he was in the best of health and having no trouble with the bladder.

A CASE OF PROCIDENTIA UTERI WITH RUPTURE DURING PARTURITION.

BY D. C. EWING, M. D., BATESVILLE, ARK.

[*Read before the State Medical Society of Arkansas, at the Ninth Annual Session, Little Rock, April 30th, May 1st, 2d, 1884.*]

On the 18th of March last, Dr. J. B. Crane and myself were sent for to see Lizzie W., colored, aged 30 years. Dr. Crane arrived at the house one or two hours before I did. After examining the case he sent immediately for me. He informed me that when he arrived he found the woman in labor, and that the womb had protruded from the vulva. With each pain the womb would descend lower. Her mother informed him that her daughter had been in labor fifteen or sixteen hours. When I examined the woman I found a case of complete procidentia uteri. The os was well dilated, membranes ruptured, and the liquor amnii had escaped some two or three hours before. We saw at once if the child was not delivered that the life of the mother and child would both be in jeopardy. We decided that the best method for relief of the mother would be to introduce the forceps, and deliver at once if possible. I applied a pair of Dr. Hodge's forceps to the child's head, and Dr. C. placed one hand on each side of the forceps against the uterus. At each pain Dr. C. made gentle pressure against the uterus with the view of forcing it as far back in the pelvis as possible, while at the same time I made traction with the forceps. After the fifth or sixth pain, the head slipped out of the womb. The body followed with the next pain. Dr. C. said that he felt something give way when the child's head passed. On examination we found that the cervix and a part of the body of the uterus had been ruptured. The rupture began at the os and extended through the cervix through the body of the uterus. The rupture was lateral and about four or five inches in length. We delivered the placenta as soon as possible, sponged the parts well with cold water, and closed the rent with silk sutures. The hemorrhage was slight, not enough to endanger the life of the patient. After delivering the placenta we found that the uterine ligaments were so relaxed

as to allow the uterus to pass entirely out of the vulva. Therefore we had but little trouble in closing the rupture. I would state that when the forceps was introduced the uterus had passed so far out that the head and shoulders of the child had protruded beyond the vulva.

I learned from the woman that she was the mother of three children. The other two confinements were free from trouble and of short duration. During the third month of her last pregnancy she said that one day after lifting a tub of heavy clothing her womb came out and remained so for a few days and receded without any assistance, and remained so until after her labor pains began.

On examining the different text-books I do not find a case of complete procidentia uteri during labor. Bedford says that there are well authenticated instances of women having passed the period of gestation with the uterus protruding beyond the vulva, but does not give an instance where the uterus could not be replaced and remained down during labor. After labor was completed and the rupture was closed and uterus returned we adjusted a "T" bandage, placed her on her back with her hips elevated, and administered one-half grain of sulphate of morphia with one dram of fluid extract of ergot, and directed that she should be kept perfectly quiet. I did not see the case again for fifteen days. Dr. Crane visited her twice a day for five or six days, used the catheter at each visit and kept her well under the influence of opium.

He informed me that her temperature was but little above normal, and that her pulse did not exceed 88 per minute at any time during the five or six days that he visited her. The lochial discharge was free and stained but little with blood. She complained but little of pain, and on the fifth day was quite cheerful, and wanted to sit up in the bed and eat her breakfast. The fifteenth day after her confinement, Dr. Crane invited me to see the case with him, but owing to a case of sickness he did not meet me. I examined her with a duck-bill speculum and found that the rupture had healed by the first intention, with the exception of about one inch of the vaginal part of the cervix. I removed all the sutures that I could without dilating the parts; the other remained without any inconvenience or trouble. I learn that she was soon able to go about and attend to her household duties.

CONGENITAL EXSTROPHY OF THE BLADDER
COMPLICATED BY UMBILICAL HERNIA.

BY G. W. HUDSON, M. D., CAMDEN, ARK.

[*Read before the State Medical Society of Arkansas, at the Ninth Annual Session, Little Rock, April 30, May 1, 2. 1884.*]

A great many congenital lesions of nature are remedied by surgical operations, but there are other cases which it would not be deemed practicable to operate upon, that might be remedied and life made more tolerable by some mechanical appliance.

Vulcanized rubber is now being used for a great variety of purposes and in the hands of the surgeon can be moulded into almost any shape he may desire for the purpose of correcting malformations and irregularities.

After a resection of either of the maxillary bones it can be used to restore the contour of the face, or in case of cleft palate can be used to great advantage for artificial palate both hard and soft, and so improve the articulation, to say nothing of the comfort otherwise. It has also been used for an artificial nose with such perfect success, that it would require the closest scrutiny to detect it.

The case I shall report is one that has recently come under my observation. A female child of Mr. S——, aged two years, has congenital exstrophy of the bladder and umbilical hernia. The posterior wall of the bladder is a vascular projecting tumor, ulcerated and discharging a muco-purulent fluid intermixed with urine, there being no anterior wall to the bladder, and fills a space in the median line of a triangular shape about one and a half inches at the base, and two inches from base to apex at the os vaginæ.

The symphysis pubis is absent.

There is a narrow cicatricial tissue intervening between the hernial ring and the bladder. The hernial opening is over an inch in diameter, and when the child is in a fit of anger the bowel protrudes two inches, covered only by the skin, which is of bluish tint and feels to the touch like a bladder.

In studying up this child's case and taking into consideration

the fact that it was growing worse every day by the protrusion of the umbilicus and the impossibility of supporting this hernia without irritating the sensitive tumor of the bladder, and on reviewing some of the surgical authorities I find the following words of Prof. Erichsen: "The malformation is incurable. Operations have been planned and performed with the view of closing in the exposed bladder by plastic procedures, but they never proved successful and have terminated in some instances in the death of the patient." They do not therefore, afford much encouragement for repetitions.

Owing to the age of the child and the importance of keeping the parts in perfect coaptation to get union by first intention and the complication of the hernial protrusion, a plastic operation was deemed inadvisable.

The operation recommended and performed by Dr. Daniel Ayres, I believe, has been conceded to be the most successful. This consists principally in dissecting a large flap of the integument from the anterior wall of the abdomen from above downward, which could not be done in this case on account of the hernia. But in the course of time I am confident this lesion can be remedied by lateral flaps, or by the use of a suitable support so that the hernial opening will contract and afford sufficient support to the bowel, and when the child is older so that it can be controlled, an operation can be performed successfully. But the question that presented itself most forcibly was what could be done at once to afford the most relief. I decided to take an impression of the opening and umbilicus, which was done with plaster of Paris, and mould a plate of vulcanized rubber to fit accurately all of the inequalities of the body, then to polish this plate as smooth as glass, so there could be no possibility of friction over the delicate and bleeding surface of the bladder, besides directing the course of the urine downward, and acting as a support to the hernia, by means of a prominence on the posterior part of the plate and fitting the hernial opening like an obturator.

I accomplished this to my own satisfaction and to the temporary relief of my patient, which was demonstrated by the ease and comfort with which it wore the instrument.

This plate was held in position by a belt around the body and two perineal straps, which are attached to the plate by four buttons.

EDITORIAL.

REESTABLISHMENT OF NERVE CONTINUITY IN A
HEALED WOUND.

That nerves readily unite after section is sufficiently frequently observed. It is well to bear in mind that the extremities of severed nerves imbedded in a cicatrix, may be subject to operation and the lost innervation thus reestablished. Dr. Tillaud (*Report French Acad. Science, Gaz.* Feb. 1, 1884, No. 27), reports two old cases of section of the median nerve thus treated, with cure of the dependent paralysis. A woman aged 23 years, suffered a cut across the front of the right wrist, the median being completely severed; the nerve was not specially cared for, and in healing of the wound there was total paralysis in its territory below the site of injury. Four months afterwards she applied for relief, as the hand was, of course, useless. The scar at the wrist was painful on pressure, and something like the proximal end of the nerve could be faintly felt. There was total loss of sensation in the parts supplied, atrophy of the ball of the thumb, lowered temperature, venous coloration. Although doubtful of success, the doctor concluded to attempt to reunite the nerve stumps and relieve the paralysis. They were found to be one centimetre apart; they were fastened and brought together by a stitch so applied that the thread should not interpose. The sutured wound was dressed antiseptically, the hand immobilized in a flexed position for eight days, when the cicatrization was perfected. From the second day after the operation, the patient complained of shooting pains at the palmar aspect of the index and middle digits; these members felt

the touch of a pin on the third day, and so sensibility gradually increased. Six weeks after the operation the patient was dismissed in condition to use her sewing needle. A second case was that of a woman suffering from a similar accident fourteen years. The day following the operation sensation reappeared, and later the hand was restored to a normal state. Both cases have remained cured. It is difficult to understand how the innervation was so promptly reestablished, as the distal trunk must have suffered degeneration of its nerve tubercles. The excised part belonging to the peripheral end was examined and found to contain only fibrous tissue.

FOREIGN BODIES IN THE VICINITY OF THE LARYNX.

In the July number of the *COURIER* appeared a criticism upon the surgical treatment of a case in which a threaded needle had become lodged crosswise at the level of the upper border of the larynx; the needle had eventually been removed after pharyngotomy. In the *Centralblatt f. Chirurgie*, No. 25, 1884, a similar case is reported occurring in Italy. A threaded sewing needle about one and a half inches in length was drawn into the throat, lodging crosswise above the larynx. Drawing upon the thread was unavailing on account of the position. By pressure from without, the point of the needle was forced into the right side of the thyroid cartilage; incision was then made through the skin and cartilage upon the point and the needle drawn out through the cut. There is given no history of attempt at removal with laryngeal forceps.

In the same publication is given a most unusual case of obstruction of the larynx by a double-headed shirt button or stud. A child aged six months swallowed such a button and immediately fell into severe dyspnea.

Tracheotomy gave relief, but the button was not found. The child died after four days from broncho-pneumonia. The button was found in the posterior wall of the esophagus at the level of

the cricoid cartilage; the broad flange lay upon the vertebra, the head so pressed upon the larynx as to cut off respiration. As the esophagus is closed by the backward pressure of the larynx, *i. e.*, the cricoid cartilage, it is readily seen how the button came to be held in its position until pushed through the esophageal wall. As in the infant the laryngeal cartilages are soft, the cricoid would easily give away before the projecting head of the stud.

PLEA OF INSANITY—AN ANCIENT EXPOSITION OF
THE LAW BY MARCUS AURELIUS.

Of late years it has too frequently been made painfully evident to thinking men, that the law in respect to pleas of insanity in defense of criminals is miserably deficient; and it does not appear that that most important subject has yet been exhaustively considered and disposed of. It is therefore not very complimentary to modern legislation, nor does it elevate our respect for the existing state of the code, to find that seventeen centuries ago the Roman Emperor, Marcus Aurelius, instructed his courts in this particular through a rescript that covers the whole ground in a manner so thoroughly consistent with common sense and so marked by the highest justice that it cannot fail to excite unreserved commendation. A plea of insanity was set up to shield a man charged with homicide. We can readily picture to ourselves how in that favorite field for display and the acquisition of profitable notoriety, the Roman court, the orator in the defense would call upon the gods to interfere in behalf of his unhappy client, already smitten by their wrath; how the judge would be threatened with public indignation, and an appeal to Cesar; how the accused would be led in mowing and chattering, and a few paid weepers of extra lachrymal capacity be distributed amidst a sympathetic audience. Evidently the pressure was too great for the presiding officer, and he applied to the philosopher emperor for advice. Would that in our Christian courts of to-day the same judgment was law! "If,"

the Emperor stated, "you find that Aelius Priscus is in such a state as to be continuously deprived of reason, and that there is no ground for suspecting fraud in the statement that he was acting under the impulse of insanity when he killed his mother, you may withhold the punishment. You must, however, *confine him in the future more closely*; so much is demanded by justice, his own welfare, and the security of those about him. But if, on the other hand, you find, as is usual with insane persons, that he enjoys lucid intervals, it is your duty to investigate carefully in order to determine whether or not the crime was committed in one of these intervals; and, if so, whether or not, even then, it is not to be attributed to his disease. Moreover, I learn from your letter that he was in the custody of his relatives, or, at all events, was living unconfined at home. You will, therefore, do well to summon those who were acquainted with his mental condition at the time, to learn the reason of their negligence in not placing him in the hands of the proper authorities, *and to punish or exonerate them*, as the circumstances of the case may justify."

There are other details in this most interesting rescript; one which touches the "expert" business, i. e., to determine the possibility of lucid intervals, and in case such were proven to refer again to the Emperor in view of the peculiar enormity of matricide. The whole may be read in the life of Aurelius by P. B. Watson of Cambridge, 1884, pp. 78. Our own legal decisions appear crude and absurdly weak when compared with the vigor and completeness of this ancient charge. We acquit a murderer on the score of irresponsibility, and immediately set him loose upon the community to re-enact his crime. The release of the criminal involves no other party; a great crime has been committed and yet there is no criminal, *reductio ad absurdum*. Aurelius declared that those whose duty it was to keep watch over the madman were to be held strictly accountable for his act. Were such regulations in force to-day, what would the plea of insanity be worth as an excuse in the criminal courts?

FLUID EXTRACT OF CAMELLIA.

Having carried on an extensive series of careful experiments with regard to the several different drugs which depend for a large part of their therapeutic virtue upon the presence of varying proportions of the alkaloid caffein, Dr. Squibb has given in the last number of his *Ephemeris* a résumé of the results which he has reached.

The several drugs studied were tea, coffee, Paraguay tea, guarana and kola nuts. As he remarks, these different substances "seem to have come into use independently in widely separated countries to produce the same effect, namely, to refresh, renew or sustain the physical and mental organism."

Observing that the physiological effects of coca are almost identical with those of the caffein group and that it is almost impossible to secure a good article of coca, he instituted a series of comparative tests.

He first experimented with the alkaloid caffein itself. He found that a distinct effect was not attained with the alkaloid until a dose of two and a half to three grains was administered.

Taking this as a standard of comparison, he found that to secure a corresponding effect with the fluid extract of coca it was necessary to administer two and a half to three drams.

He next tested a fluid extract of Chinese or Japanese tea. He notes particularly the extreme care with which the tea leaves are selected and handled, the accuracy with which samples are taken and the skill that is developed by those who test and deal in teas, as compared with the carelessness and unreliability of the methods with which many of our drugs are gathered, handled and sampled.

The Fluid Extract of Camellia (Dr. Squibb gives this name to the fluid extract of tea leaves in order to distinguish the preparation made for therapeutic purposes from the tea used for domestic purposes) made according to the formula which he proposes, "is an almost syrupy, transparent liquid, of a rich, dark, olive-green color, almost black, with a fragrant odor of the tea and its agree-

able, bitter taste." It makes an opaque mixture with water, syrup or wine, but there is no precipitate.

On testing the physiological effects of the preparation, Dr. Squibb found that the same effects were produced by seventy minims of it as by three fluidrams of fluid extract of coca or by three grains of caffen. Inasmuch as this amount of the fluid extract contained only 2.01 grains of caffen, it follows that about two grains of caffen in tea, in its natural condition, is equivalent to three grains of caffen extracted from its natural combination, and that seventy minims of the fluid extract of tea are equivalent in effect to two and a half times that quantity of a fluid extract of the best accessible coca.

Dr. Squibb thinks that whatever therapeutic effects have really been attained from coca will be secured better and more certainly from tea. The fluid extract is uniform, and exhausts the leaves of all their medicinal virtue, neither of which things is true concerning the domestic infusion.

We shall hope to have reports of results obtained by using the new fluid extract of camellia.

CORROSIVE CHLORIDE OF MERCURY AND CHLORIDE OF GOLD IN DIPHTHERIA.

Dr. Geo. A. Lynn, whose paper published in the Transactions of the State Medical Society of Pennsylvania did much to call attention to the value of corrosive sublimate in the treatment of diphtheria, read another paper before the Section on Practice of Medicine at the recent meeting of the American Medical Association, in which he sets forth the proper mode of administering this remedy in the treatment of this disease.

In order to make it thoroughly reliable and valuable he says:

1. It must be used in the first stage of the disease.
2. It must be used in large doses frequently repeated.

The first rule is apparent, he thinks, from the fact that the greatest value of the medicine is in the prevention of the formation of the poison in the membrane, and it should not be put off until all other remedies have been tried and have failed.

The effect of the remedy given early as he directs is, as he claims, to reduce the temperature, relieve pain in the head, back and limbs, unlock the secretions, lessen the soreness in the throat, in time to relieve the nausea and vomiting.

He advises as the best mode of administering it that a solution be made in the proportion of one grain of the bichloride to one dram of alcohol. Dispensing from this the annoyance and uncertainty of weighing out fractions of a grain is avoided. He recommends as a vehicle for the bichloride of mercury an elixir of pepsin or of pepsin and bismuth. To a child of three years he gives from $\frac{1}{16}$ to $\frac{1}{12}$ grain according as the disease is mild or malignant, repeating the dose every three hours. To an adult $\frac{1}{10}$ to $\frac{1}{8}$ grain may be given at the same intervals. He states that in mild cases convalescence is generally established by the end of the third day, when the treatment is commenced early, and that it is seldom necessary to continue it longer than five days.

When this treatment is instituted early, nothing else is found necessary. In cases where it is not commenced till late in the course of the disease it may be necessary to give tonics and stimulants, as tincture of iron and brandy.

In some cases membrane has already formed before the physician is called to the case or before the remedy has had time to take effect, and then if it affect the larynx or trachea a new danger arises from the mechanical obstruction for which the corrosive chloride gives no relief. In many cases of croup, simple or diphtheritic, dyspnea is due not to the mechanical obstruction produced by the membrane, but to a spasmodic condition of the glottis. Dr. Lynn thinks that a remedy which will relieve this spasm will obviate the necessity of resorting to tracheotomy in nearly all cases. He believes that we have such a remedy in the chloride

of gold. He was led to try this by observing the effect of this drug in the treatment of a case of hysteria, as suggested by Niemeyer, and noting the effect upon the nervous respiratory symptoms.

He was so much pleased with its action in a very severe case of diphtheritic croup in which he used it that he has continued its use in all cases of croup since then. In simple croup he claims that it acts as a specific and obviates the necessity of using any other remedy.

As the chloride of gold is very deliquescent and difficult to weigh, he directs the druggist to dissolve the contents of a fifteen-grain bottle, as it comes from the manufacturer, in fifteen drams of distilled water and to dispense from that solution. The dose may be $\frac{1}{50}$ to $\frac{1}{20}$ grain and may be administered easily in water, as it is almost tasteless. It should be given from a glass or a teacup, as the preparation acts readily on metals, especially upon silver.

INOCULATED YELLOW FEVER.

M. Carlos Finlay has been carefully studying the nature and pathology of yellow fever, and believes that the disease may be transmitted by the stings of mosquitoes. He has made some experiments which seem to establish the truth of the position which he assumes. His method was as follows: He placed in a test tube a mosquito which seemed to have not yet filled itself. After a few hours he unclosed the tube and placed its open end upon the arm of a yellow fever patient. In two to five minutes the insect engorged itself with blood, and he then closed the tube with a bit of cotton. Two or three days later the mosquito was placed in contact with the arm of the subject who was to be inoculated. The persons who were so inoculated were soldiers, other unacclimated young persons and one Jesuit priest.

In all eighteen experiments were made. In eleven no result followed, one was followed by an undefined febricula which did not even compel the subject to go to bed; the other six manifested all the characteristic symptoms of a mild form of yellow fever. The experiments were carefully made and the cases were closely watched all through.

The report of these experiments which was published in the *Cronica Medico-quirurgica de la Habana*, is an exceedingly interesting study. Dr. Finlay believes that he has demonstrated that yellow fever is inoculable by the sting of the Cuban day-mosquito during the third, fourth, fifth and sixth days of its evolution, but not during the first two days nor after the sixth, no matter what be the severity of the symptoms at those periods. The duration of incubation offers the same variations in the inoculated as in the natural disease, in either case varying from five to twenty-four days.

The duration and intensity of the fever produced by inoculation by the mosquito appears to be in proportion to the number of punctures and the quantity of inoculable matter retained by the insect's sting. The inoculation by one or two punctures in no case produced any other morbid phenomena than those of benign natural yellow fever.

Dr. Finlay thinks that the results already obtained warrant the assertion that the inoculation of yellow fever by one or two mosquito bites is a plausible means of imparting without peril immunity against the severe forms of the disease to which those are exposed who dwell in an infected district.

He notes also the importance of guarding yellow fever patients from the stings of mosquitoes on account of the danger of these insects communicating the disease to others.

A PINCH of snuff, or anything that will provoke a sneeze, will cure hiccough.

BOOK REVIEWS AND NOTICES.

POST-NASAL CATARRH AND DISEASES OF THE NOSE CAUSING DEAFNESS. By EDWARD WOAKES, M. D., Etc., Etc. Illustrated with wood engravings. 1884. 12mo; pp. 224; cloth; \$1.50. *Philadelphia: P. Blakiston, Son & Co. (St. Louis: J. H. Chambers & Co).*

This brochure timely meets a desire on the part of the general profession to acquaint itself with the diseases of the post-nasal space, the vault of the pharynx, that are of such importance not only in themselves as obstructing respiration, injuring the voice, and giving rise to nervous disorders, but also as threatening the sense of hearing through involvement of the Eustachian tube and tympanum. The book is not so bulky but what a reader can quickly look it through, yet it includes the essentials of the materials so far gathered.

An introductory chapter is devoted to considering the function of the sympathetic system as regards nutrition. The author bases his pathology chiefly upon supposed derangement of those ganglia. As "taking cold" is the usual foundation for nasal catarrh, a chapter treats of that phenomenon. An ingenious explanation is given to meet the question why after that the feet are chilled the mucous membrane of the head cavities suffers. The morbid impression is conveyed upwards from ganglion to ganglion until the cervicals are reached. These by reason of their complicated function are more sensitive, and the shock is discharged through their efferent nerves. This view gives the basis of the author's pathology.

The subjects of nasal and pharyngeal catarrh, tonsillar disease, obstruction of the nasal passages are carefully and succinctly discussed, operations in the nasal passages are described and the various methods analyzed. But in regard to the operation for relief of curved septum nasi the author is certainly not as exhaustive as that important procedure observes. The method of Dr. A. J. Steele, as described in the *COURIER*, the star incision by his cutting forceps, is vastly preferable to the punching out operation whereby a

permanent opening is left. The author entirely underrates the bad effects of making a permanent opening, and the profession should be warned against it. It is a positive misfortune to have a perforated septum, except among those tribes that regard nose rings as ornamental as similar appendages in the ears. Upon the edges of the unnatural opening the nasal mucus *will dry*, forming crusts; these annoy, and the patient is pretty certain to pick them off, or they are blown off in a violent effort; with the crust will generally come the underlying delicate new-formed epithelium, and so the erosion continues, until imperceptibly much of the septum melts away; then, it is no longer possible to clear the nostrils in a natural way, and all the evils of an incurable nasal catarrh with stinking nasal accumulations, have been invited. A most unhappy result! On page 61, the phrase "mechanical jugulation" would seem a little prolonged, and the criticism upon the use of sugar, p. 79, may help to confirm prudent mothers in their injunction upon the nursery saccharinum; "catarrhs, gout, bad temper, and other minor ills, it is probable were less common previously (*i. e.* before use of sugar), a conclusion which suggests that the sum of physical happiness has not been enhanced by the extensive introduction into food of this product of tropical suns."

C. A. TODD.

AUSCULTATION, PERCUSSION AND URINALYSIS. Edited by C. H. LEONARD, A. M., M. D., Etc. Fully Illustrated. *Illustrated Medical Journal Co., Detroit, Mich.* 1883. 12mo.; pp. 66; cloth \$1.00.

This little volume is an ingenious compilation and presents the most important facts under the several points in physical examination in a very condensed form. The chapter on urinalysis is prepared for the book by Dr. W. N. Rowse, M. D., etc., of Detroit.

MEDICAL GERMAN. A manual designed to aid physicians in their intercourse with German patients and in reading medical works and publications in the German language. By SOLOMON DEUTSCH, A. M. Ph. D. *New York: J. H. Vail & Co.* 1884. 12mo.; pp. 336; cloth; \$2.25. (St. Louis: J. H. Chambers & Co.)

This little volume is arranged, as is indicated on the title page, for the use of American physicians in their intercourse with German patients. There is scarcely a village anywhere in the West in which there is not a number of German people; and the physician who cannot converse with them in their own tongue is at a serious disadvantage. To any such physician the help which he can ob-

tain from this book will be almost invaluable. Prof. Deutsch is a teacher of much experience and great ability; and he has brought both into requisition in the preparation of this volume. He has accomplished a good work, and the publishers will no doubt be amply rewarded for their part by the sale of large numbers of it.

TRANSACTIONS MISSISSIPPI STATE MEDICAL ASSOCIATION. West Point, April, 1884. 8vo.; pp. 190; paper.

This volume contains a number of papers of considerable interest and of sufficient merit to have made the meeting, at which they were read profitable and interesting.

The general appearance of the volume is good, but close examination shows great lack of care in correcting proof as well as in the final preparation of the material for the press. The committee on publication should give a little more attention to both of these points another year.

PROCEEDINGS, ADDRESSES AND DISCUSSIONS of the third semi-annual meeting of the KENTUCKY STATE SANITARY COUNCIL, held at Beards-town, Ky., Mar. 26 and 27, 1884, under the auspices of the State Board of Health. 8vo.; pp. 60; paper.

The object of the Kentucky State Sanitary Council "is to bring together representative men of the state, of every profession, who are interested in sanitary reform, for a comparison of views and discussion of methods relating to the prevention of disease."

Quite a wide range of topics was presented and discussed. Most of the papers were brief, and the interest of the meetings was well sustained. Such meetings are calculated to be of great advantage to the communities in which they are held.

ILLUSTRATIONS OF THE INFLUENCE OF THE MIND UPON THE BODY, designed to elucidate the action of the Imagination. By DANIEL HACK TUKE, M. D., F. R. C. P., LL. D., etc. Second American from the Second English Edition. 8vo.; pp. 482; cloth. Philadelphia: Henry C. Lea's Son & Co. 1884. (St. Louis: J. H. Chambers & Co.)

More study and careful thought has been given to the subject of which this book treats during the last few years than ever before, and the author has contributed his full share to this study.

In this present volume he has brought together a great many observations which are scattered through very numerous volumes and medical journals. It is a book of great value to one who is studying this subject. In preparing the second edition the author has added a number of observations in different departments.

While a vast amount of careful research and close study is ev-

ident all through this volume, it is the last part that is probably of the greatest value, that in which the author calls attention specially to the importance of a judicious use of the influence of mind upon the body as a therapeutic resource in treating various diseases, particularly those of neurotic origin.

ECZEMA AND ITS MANAGEMENT. A Practical Treatise based on the Study of Three Thousand Cases of the Disease. By L. DUNCAN BULKLEY, A. M., M. D., Physician to the N. Y. Skin and Cancer Hospital, etc., etc., etc. Second Edition. *New York: G. P. Putnam's Sons.* 1884. 8vo.; pp. 344; cloth. (St. Louis Stationery and Book Company; J. H. Chambers & Co.)

We are glad to welcome Dr. Bulkley's exceedingly valuable and meritorious monograph on eczema in its second edition. The comparatively rapid sale of the first issue shows that the book proved both useful and acceptable to the general medical public. This edition has undergone a thorough revision; alterations occur on almost every page, and some portions have been entirely rewritten. Although materially at variance with the author in many of his theoretical considerations, and to some extent in his practical views, we fully and heartily indorse his work, and recommend its careful study to medical men.

W. A. H.

A TREATISE ON SYPHILIS IN NEW-BORN CHILDREN AND INFANTS AT THE BREAST. By P. DIDAY. Translated by G. WHITLEY, M. D. With notes and an Appendix by F. R. Sturgis, M. D. *New York: Wm. Wood & Co.* 1883. 8vo.; pp. 310; cloth; (Wood's Library of Standard Medical Authors).

The classical work of Diday, which, if we mistake not, was first translated by the Sydenham Society, needs no word of commendation from us at this late day; for many years it has been preeminently the authority on this subject. Messrs. Wm. Wood & Co., the enterprising medical publishers, have recently presented us with an American edition, forming a part of their well-known library, and have been fortunate enough to secure the services of Dr. Sturgis as editor. Almost up to the time of our fathers a book once established as an authority could remain ever as such without the necessity of a revision for many decades; but the rapid progress of modern medicine does not even wait on a classic, and Dr. Sturgis has been obliged to add many notes to the present work. These copious and judicious annotations, together with an appendix relating to the viability of syphilitic children, and the accidents of late congenital syphilis, have made the book all that is desirable as the best work of study and reference now in our possession.

W. A. H.

QUARANTINE AND SANITARY OPERATIONS OF THE BOARD OF HEALTH OF THE STATE OF LOUISIANA during 1880, 1881, 1882 and 1883. By JOSEPH JONES, M. D., President of the Board of Health of Louisiana. 8vo.; pp. 313, paper.

This report contains a great deal of valuable material including a history of quarantine in Louisiana from the time when it was first established in 1855. Other valuable papers are those considering the climate and health of Louisiana, and preventable causes of death. In the latter especially there is much food for thought.

BOOKS AND PAMPHLETS RECEIVED.

Poisoning by Canned Goods. By John G. Johnson, M. D., (Reprint from the *Medico-Legal Journal*.)—Annual Announcement of the Medical Department of the Niagara University, Buffalo, N. Y. Session of 1884-'85.—Quarantine and Commerce. By the President of the Board of Health of the State of Louisiana, June 26, 1884.—Annual Announcement Memphis Hospital Medical College, Session 1884-'85.—Woman's Medical College of the New York Infirmary, June, 1884.(G. P. Putnam's Sons.—Gulf Coast Quarantine, Report to the Tennessee State Board of Health. By G. B. Thornton, M. D., of the Quarantine Conference held at New Orleans, June, 1884.—Memoir on the Nature of Diphtheria. By Drs. H. C. Wood and H. F. Formad, of Philadelphia. Appendix A. Report of the National Board of Health for 1882. 8vo.; pp. 133, cloth. Philadelphia, Lippincott & Co.—Pathology and Morbid Anatomy. By T. Henry Green, M. D. 8vo.; pp. 471, cloth. Philadelphia: Henry C. Lea's Son & Co.; St. Louis Stationery & Book Co.—Diseases of the Heart and Thoracic Aorta. By Byron Bramwell, M. D., F. R. C. P. E. With 317 illustrations. 8vo.; pp. 783.; cloth. New York: D. Appleton & Co.; St. Louis Stationery & Book Co.—Sixteenth Annual Announcement of the Kansas City Medical College. Session of 1884,'85.—Brown's Phonographic Monthly and Reporters' Journal.—Annual Announcement of Trinity Medical School, Toronto, 1884, '85.—Sixth Annual Announcement Fort Wayne College of Medicine.—The Urine in Diseases. A Chart arranged by Louis Lewis, M. D., M. R. C. S., England. (Supplement to "The Medical World," Philadelphia.)—International Medical Congress. Eighth session, Copenhagen. Rules and Programme.—Pain vs. Neuralgia in Sympathetic Ophthalmia and Glaucoma. By William Dickinson, M. D.—Carbonate of Ammonia; Its Use and Value as a Vesiculating or Leavening Agent.—Puerperal or Child-bed Fever. By T. Griswold Comstock, A. M., M. D. St. Louis. (Reprint from the *New York Medical Times*.)—Forty-Fourth Annual Announcement and Catalogue of the Missouri Medical College for 1884,'85.—Announcement of the Fourth Annual Session of the Medical Department of the University of Denver, Denver, Col. Collegiate year of 1884, '85.

TRANSLATIONS.

DEGLUTITION SOUNDS.

Translated by H. W. HERMANN, M. D., St. Louis.

The late investigations in regard to the act of deglutition, published by Kronecker and Meltzer, have directed the attention of physicians to the auscultation of the sounds or noises produced by deglutition, hoping in the new light of better interpretation of these sounds to make better use of them for diagnostic purposes. While heretofore we assumed that the act of deglutition was performed by the constrictors of the pharynx and a peristaltic movement of the muscles of the esophagus, the above gentlemen have shown that the act of swallowing consists of two distinct phases: the first consists of a rapid passage of the swallow through the esophagus into the stomach, by means of the muscles of the tongue, the mylohyoid and the hyoglossi muscles, contracting on a closed cavity in which a high pressure is produced: the second following later consists of a number of consecutive contractions of sections of the esophagus, which transfer remaining particles into the stomach, by means of a kind of peristaltic movement. The first sound is only of momentary duration, lasting about $\frac{1}{10}$ of a second. The second follows within 6 or 7 seconds later, and is heard best over the xyphoid process.

The contractions of the esophagus producing the second sound take place in regular progression, so that when the upper section contracts in 0.3 second, the next contracts in 0.9 the third in 1.8 seconds. We may divide the esophagus into three or four of these sections. When one swallow quickly follows another the last exerts an inhibitory influence on the second phase, and the second sound is not heard until after the last swallow. According to Kronecker and Meltzer the cardiac orifice is generally closed by a slightly tonic contraction of its sphincter muscle. The first act transfers the bolus to the cardia, the second through the sphincter into the stomach. The second sound is not always heard especially when the first sound is very plain, the second may be

wanting; and, reversely, when the first is indistinct, the second is the plainer. It also seems that an antagonism exists between the esophageal muscles and the sphincter of the cardiac orifice, for when the esophagus is relaxed the sphincter is contracted, and when the esophagus contracts, the sphincter opens. Prof. Ewald in a paper read before the Berlin Medical Society contends not to have been successful, in a large number of patients in detecting the second sound so soon after swallowing, but claims to have heard it also at other times when the patient did not swallow. He suggests, therefore, that the second sound is produced by passive contraction of the muscles of the stomach. He has not been able to arrive at conclusions which might be of aid in diagnosis. In the discussion following the reading of the paper, Prof. Fraenkel in very able arguments, supported by a large number of observations, defended the view taken by Kronecker and Meltzer and emphasized the pathological importance of the deglutition sound in paralysis of the esophagus. In this condition following a lesion of the pneumogastric, and contrary to cases of paresis of the velum palatinum, patients can swallow fluids and semi-solids, while a more solid bolus remains dormant in the esophagus, giving rise to very uncomfortable sensations, particularly that of suffocation. Patients with stricture of the esophagus are not afraid to swallow, they will undertake to swallow relatively solid substances. These when too large will simply be caught in the dilatation above the stricture, from where they either pass through the constriction, or are regurgitated. But people with paralysis of the esophagus, will not undertake the swallowing of solid substances, for fear that they may remain in the esophagus. In these cases a bougie passes through very readily. In these cases the second sound is markedly retarded and increased. In some of Fraenkel's cases the second sound was sufficiently intensified to be heard from a distance of several feet. The deglutition sounds in cases of stricture are not changed. In both stricture and paralysis of the esophagus, there is difficulty in swallowing solids, while fluids can be readily swallowed. In stricture there is no change in the deglutition sounds, and a bougie meets with an obstruction, while in paralysis a bougie passes freely and the second sound is delayed and increased.—*Berlin Klin. Wochenschrift.*

EXTIRPATION OF THE KIDNEY.

BY PROF. THEO. BILLROTH.

[*Abstract of Lecture delivered before the Medical Society of Vienna.*]

We are familiar with the fact that a man can survive the loss of one kidney, but it was only fifteen years ago that Simon ventured to act upon this knowledge and remove a diseased kidney. Simon's method remains the model operative procedure; his preparatory experiments and anatomical studies are of such exactness that present extirpations are but demonstrations of their correctness. The subsequent advance in antiseptic methods has been of great assistance in furthering success. The difficulty of making a certain prognosis will hardly ever be entirely removed, since all depends, naturally, upon the condition of the remaining organ; a moderate degree of sepsis that could readily be eliminated by two normal kidneys, may prove fatal when there exists but one, and that possibly not normal in structure. Disease is rarely limited to one kidney; hence extirpation can not be thought of as an operation frequently indicated. Consequently, the work of Simon was regarded at the time rather as a *curiosum* even by those who granted the most praise, and few of us could have anticipated that within fifteen years nearly one hundred and fifty extirpations of the kidneys should have been published.

The operation is still too novel to afford sufficient statistics as a basis for formulation. Besides operations on the kidneys, surgically speaking, are much too varied in character, to allow statistic generalization to be of value as a guide to prognosis in any given case. Whether we shall remove a sound kidney on account of ureter fistula from the lumbar region, whether a large or small renal tumor by laparotomy or lumbar section, etc., there is a vast difference both in respect to method and the consequent loss of blood as well as in respect to other important circumstances.

It is to be noted, also, that in novel operations, before the indications and methods have been established by experience, the surgeon is justified in taking such hazardous measures only when the

disease is already far advanced and the patient in a desperate condition. Again, every bold operation exercises a fascination upon the public and medical men. Had I been willing to operate upon all the unfortunates with gastric cancer that have come to me for that purpose, I should have certainly ten times as many cases to record as have been recorded; but then I should have myself lost confidence in the operation even in suitable cases and *should have prostituted* it in the eyes of my colleagues.

All these matters make it comprehensible why the beginnings of the statistics of novel operations can give no available ground for prognosis and estimation of their real value. Still if the statistics collected make out that of one hundred patients subjected to a new operation, all recover or all die, something assuredly is signified.

Of one hundred and thirty-two recorded cases with known results, the mortality has been 47 per cent; this merely indicates that taking all in all, more than half of those operated on may recover and that in consequence the operation appears at least allowable; as to prognosis in individual cases it is of no value at all.

Omitting at present details of method, I will take up the consideration of the indications for the operation and prognosis. We must exclude, properly, from the list of cases recorded such as were accidental extirpations, such as were performed under the mistaken diagnosis of ovarian tumor or uterine fibroma, etc., only to be recognized at the end of the operation. Such cases are not few in number; I include, however, removals made necessary through adherence of a normal kidney to an abdominal tumor, the removal being required because of the impossibility of stopping the great hemorrhage from a torn kidney. This complication has befallen several English surgeons, and myself once. All such patients have died, either from collapse or peritonitis. In these several cases of laparotomy, the renal extirpation either had no consequence at all, or only indirectly, since there was left but one kidney for elimination of septic matter.

Concerning the removal of healthy kidneys we have three indications:

1. Removal of an exposed kidney upon injury of the abdominal wall. This has been made three times and successfully.
2. Removal of healthy kidneys on account of incurable fistula

of the ureter. This operation was first made by Simon. These cases may be grouped in three classes:

Fistulæ in the abdominal walls due to injury three cases (stabs and surgical wounds); uretero-vaginal fistulæ in cancer of the uterus and vagina, two cases; uretero-utero-vaginal fistulæ, four cases. Of these nine cases, six recovered; two died within twenty-four hours from collapse; one died after eleven days, of marasmus and anemia, the remaining kidney being diseased. The removal of so necessary an organ as the kidney is so serious a loss that we should be most particular in avoiding injury to the ureter in operations and strive to relieve ureter-fistulæ when they do occur by less radical measures.

3. Removal of a healthy movable kidney. In the greatest number of cases of floating kidneys women are the sufferers and the right kidney is the one affected. Much distress is occasioned which in most may be relieved by a bandage; but in some cases the organ, falling downwards and forwards, drags so heavily upon stomach and occasions such severe nervous symptoms that gradually extreme marasmus and inanition supervene; gastric catarrh, nervous dyspepsia, even gastric cancer is diagnosed.

I have extirpated a movable kidney which I now publish for the first time. A woman, aged twenty-eight years, came to me with gastric cancer, as diagnosed by her physician. In the course of about three years a continually increasing dyspepsia had developed; previously her health had been good. She had now become extremely emaciated and so feeble as to be scarcely able to stand. For some weeks almost all food was vomited. A very movable tumor could be felt in the pyloric region, painful on pressure. But, in reexamining under narcosis I became doubtful as to the diagnosis of cancer; the tumor could be replaced and was in all probability the displaced right kidney. Still, at that time I could not well believe that merely a movable kidney could cause such profound disturbance of nutrition and at the same time the persistent vomiting. I suspected in addition stenosis of the pylorus. August 17, 1881, I incised the abdomen as for resection of the pylorus and found all normal but the loosened kidney, which apparently by dragging on the pylorus had excited the symptoms; I therefore removed the kidney and closed the abdominal wound in the usual way. The operation did not require much time, neither was there much loss of blood; nevertheless, the greatly weakened

patient fell into profound collapse, but recovered under stimulation. After eight days she died with retro-peritoneal suppuration in the right lumbar region and consecutive peritonitis.

Out of fourteen cases of extirpation of movable kidneys, eight recovered. The deaths were due partly to inanition, partly to peritonitis; two were removed through the lumbar section; twelve after laparotomy.

Unfortunately, so far the operation for fixation has no lasting good results.

We next pass to extirpation of diseased kidneys, cases of renal suppuration, hydro-nephrosis, renal tumors. Suppuration of the kidney is known to be specially dangerous to life, and very often both kidneys are affected. I have made a few operations in pyo-nephrosis calculosa and peri-nephritic abscess, but have never felt justified in extirpating the kidney in these cases; hence I must refer to others. Czerny has informed me that he does not think one-sided kidney abscess infrequent. He opens the abscess in the lumbar space, cleans and drains the cavity most thoroughly; if then there is no more pus in the urine from the bladder it is most probable that the other kidney is sound. In women by direct sounding of the ureters it can be determined whether pus comes from both or only one kidney. While this method is the only one for such determination it is not absolutely reliable; it may be that the abscess is cut off from the ureter by a sort of valve. It should be borne in mind, that if after having laid open an abscess pus is found to flow from the other kidney a lumbar fistula has been added to the patient's disorder.

In spite of the difficulties attendant upon the operation firm adhesion of the kidney with surrounding structures and escape of the pus over the fresh wound, it has been performed twenty-two times with good results; only eighteen have been followed by death. Of those dying many survived several weeks, death being due to inanition or disease of the other kidney. The cases were pyo-nephroses with and without calculus, and tuberculous pyo-nephroses; the lumbar section was chiefly adopted.

2. Hydro-nephrosis. The indication is debatable since the disease of itself is rarely fatal, and since it can sometimes be cured otherwise than by extirpation (injection of iodine, incision). To be sure these measures are not always radical; relapses may occur; still, if the sac remains for years greatly reduced, that is a

good result. The great difficulties of diagnosis I will not detail. Most of the extirpated renal dropsical sacs were operated upon under the mistaken diagnosis of ovarian cysts. Nine such renal sacs have been removed, most of them diagnosed as retro-peritoneal ovarian cysts; of the six patients recovered; three died. The fortunate outcome may be due to the fact that the system had already become accustomed to the activity of but one kidney.

3. Nephrectomy on account of neoplasms. Thirty-three cases—twenty deaths, thirteen recoveries. This is the only class in which the fatalities exceed in number the cures; but one ceases to wonder after reading of the frightful perils incurred; tumors double the size of a man's head in feeble elderly people, enormous medullary cancers in miserable children. Some did not survive to leave the operating table.

Here, two were errors in diagnosis. It seems to me that in this field too much has been ventured. I will publish for the first time two cases of my own, both fortunately recovered. In all I have six times removed the kidney, with four fatal issues:

CASE I. A woman, æt. 38 years, five years previously by a slight but constant pain became aware of a tumor in the right abdomen; latterly the tumor having reached the size of a man's head, the discomforts rendered her incapable of labor. I believed after careful examination, that it was a retro-peritoneal fibroid tumor originally springing from the uterus or right ovary, but now distinct; of such I have seen several. It would take too much time to enter into the full particulars of the grounds of diagnosis. The possibility of a renal tumor was suggested, but such a slowly growing renal tumor is a great rarity, and it is always unjustifiable to allow the unusual to affect materially the diagnosis. Some albumen was in the urine, but no casts; that is often enough found in retro-peritoneal tumors, and has a mechanical explanation. No foreign elements were in the urine, nor had it ever contained blood. January 5, 1883, the abdomen was opened and tumor laid bare. Its smooth surface displayed a frightful number of large veins some of which were torn in freeing the growth.

A rubber ligature was thrown about the pedicle and the mass cut off, when I found that a smooth-walled cavity had been opened out of which some clear liquid escaped. In the pedicle, to our astonishment, we recognized the dilated kidney pelvis; the extirpated tumor was the degenerated right kidney. The pedicle was

compressed close above the ligature with a clamp forceps, several ligatures were applied and then removed with thermo-cautery. The abdominal cavity was cleansed, drainage tubes were introduced and the external wound was closed. In six weeks the patient was discharged cured.

CASE II. A man, æt. 33. Up to time of disease of left kidney, he had been strong and well. The kidney was about three times the size of the fist and was removed by lumbar section. The growth was an interstitial papilloma. The wound healed favorably.

As to method of operation in nephrectomy, that through the lumbar space is to be preferred. The cut is made from the edge of the quadratus lumborum muscle forwards and downwards, about two fingers above and parallel to the crest of the ileum, even as far as the spermatic cord if necessary; thus room is gained for removal of very large tumors. The cut muscles and fascia unite very well with appropriate ligation. In the extirpation of suppurating kidneys and when there are tumors, much caution must be exercised; the whole kidney must be swept around and freed until its hilus and entering structures are exposed. The ligatures must be surely applied; that is the supreme element in the operation. Should the artery or vein be torn, the bleeding is enormous and life is in peril. The large cavity left after removal of the kidney is quickly closed by the pressure of the adjacent viscera. Two large draining tubes usually suffice. It often happens that an abscess forms about the stump which opens either into the colon or bursts through the cicatrix; this usually is without serious result.

Much more complicated is nephrectomy with laparotomy. The bloody serum which is speedily exuded, is a particularly favorable medium for the growth of bacteria and intensely septic matters. To get rid of this serum out of multiple cavities formed by the viscera is of the utmost difficulty; we should, therefore, observe the strictest antisepsis and stop all bleeding. If the peritoneal covering of the kidney tumor has been split, after operation the abdominal walls should be pierced backwards or laterally and one or two drainage tubes inserted; if this is not practicable, drain through the anterior wound, only the peritoneum should be closed carefully close upon the tubes.—*Wiener Med. Wochenschrift*, Nos. 23, 24, 25, 1884.

REPORTS ON PROGRESS.

SURGERY.

Injury of the Spine Followed by Acute Diabetes Mellitus.—DR. SCHEUPLEIN reports a dislocation of the spine in the region of the first lumbar vertebra in a man twenty-three years of age, due to a fall. There was no paralysis, the dislocation was reduced by extension and manipulation, and the patient was kept upon his belly for ten days, antiphlogistic treatment being also followed. After five weeks the patient was able to walk without difficulty.

On the eleventh day after the fall diabetes mellitus appeared, which rapidly assumed a high degree. This entirely abated under indifferent therapeutics before the dismissal of the man, which took place in ten weeks.—*Centralblatt Med. Wiss.* No. 22, '84.

Gastrostomy and other Operations for Stricture of the Esophagus.—DR. S. W. GROSS finds from the consideration of 194 cases of operative procedure that gastrostomy has proved to be the simplest, most rational, and safest of the four operations for the relief of carcinomatous stricture. Increasing experience demonstrates that the results are growing better and better, which cannot be said of esophagostomy; and there is every reason to believe that the successes will become more numerous if it is resorted to as soon as the diagnosis of the disease has been made, and before the powers of the patient are materially impaired. The few deaths do not constitute an argument against its adoption; while, "every recovery is a clear gain; and a fatal issue is simply the natural termination forestalled."

The operations which have been practised for *cicatricial stricture* are gastrostomy, esophagostomy, internal esophagotomy, combined esophagotomy, and retrograde divulsion. Dilatation Dr. Gross holds is merely a palliative remedy, and sufficient time has not yet

elapsed to test the value of divulsion through an opening in the stomach. Combined esophagotomy for stricture near the cardia is only applicable to children, and may prove of value in strictures impassable by instruments introduced through the mouth. Internal esophagotomy, if performed at all, should be reserved for comparatively recent and short strictures, and esophagostomy is only applicable when the incision can be made below the obstruction. Gastrostomy he holds is the best and safest operation for simple stricture of the esophagus.

From the great difficulty of managing *cicatricial stricture in children* by dilatation, which is due partly to the struggles of the subject, and partly to the disinclination of the parents to distress the child, Dr. Gross holds that dilatation should be resorted to only when the inflammation has subsided, and the denuded surface is in a granulating condition. When the constriction is of some standing, and efforts at dilatation prove fruitless, gastrostomy will prove to be the safest and most beneficial operation for prolonging life.

Dr. Gross gives elaborate statistics, based on 271 cases, in regard to operative interference for obstruction of the esophagus.

Pathology of Paget's Disease of the Nipple.—DRS. LOUIS A. DUHRING and HENRY WILE, of the University of Pennsylvania, give an instructive study of the pathology of Paget's disease, which has already evoked some discussion. The importance of the subject is apparent, and it ultimately resolves itself into the question of distinguishing between ordinary eczema of the nipple and another similar cutaneous pathological process which on good grounds is believed to lead to the formation of malignant disease of the mammary gland.

The affection is regarded by Drs. Duhring and Wile as an abnormal proliferation and degeneration of the rete, with secondary destruction of the papillæ of the corium, and subsequent development of scirrhus cancer of the atrophying variety. The cancerous change originates in the epithelium of the smaller ducts, and advances from below upwards and outwards as far as the skin is concerned; later it attacks the gland structure; and the retraction of the nipple is an early sign of carcinomatous change.—*Am. Jour. of Med. Sci.*, July '84.

Cirroid Aneurism of the Hand.—M. DESPRES reported at the Paris Surgical Society a case of cirroid aneurism of the hand,

which gave rise to an interesting discussion of this peculiar form of vascular disease. A woman sixty-four years old, of very good health, exempt from rheumatism and syphilis, at the age of fifty-five observed the middle finger of the right hand increasing in size and assuming a bluish color. Little by little this condition involved the whole finger and also invaded the index and palm. Three months before her admission into the charity hospital, the extremity of the middle finger had mortified; at this time the middle finger was double its normal thickness, the index also much swollen, the lesions extending into the palm as far as the hypothenar eminence. The radial artery was sound, but the ulnar was sinuous; arterial compression stopped the throbbing felt in the fingers. M. Després cut out about three centimetres of the diseased ulnar artery just above the wrist, then amputated the middle digit with head of metacarpus. The operation succeeded in arresting the growth of the cirroid tumor. He suggested as a cause of this form of tumor, vaso-motor disease. Examination of the excised part of the artery discovered no alteration of its walls.

He had exsected the ulnar on the supposition that it was the sole cause of the affection, the radial being healthy. He had preferred to attack the artery rather than the tumor, as this was very extensive and could not be surrounded with ligatures. Testimony was given to the effect that upon removal of the aneurism, the large arteries which feed it and become much enlarged, as in the scalp attaining the size of the femoral, not only cease to increase in size but quickly regain their normal calibre. This seems to support the view that the disease originates at the periphery and is not central in origin—*Gaz. Hebdom*, No. 16, '84.

Silicate of Sodium Bandage.—DR. E. O. BARDWELL speaks in terms of highest commendation of the silicate of sodium bandage for a fixed dressing in fractures of the long bones.

It is of a syrupy consistence, and is readily applied by painting with a common flat varnish brush after applying a roller bandage, protecting the joints and bony prominences with cotton. Other bandages are then applied and painted in the same manner until four or five thicknesses are in position. If necessary strips of roller may be laid lengthwise between the bandages and painted with the solution. The bandage so applied is more uniform in thickness and more cleanly than those of starch, dextrine or plaster of Paris, and does not contract on drying like those.

It is generally best to cut the splint after about twenty-four hours. It may be kept in place by means of tapes tied around. If the part be smaller by reason of the swelling having diminished a narrow section may be cut out before reapplying it.—*Jour. of Amer. Med. Assoc.*, July 12, '84.

OBSTETRICS AND GYNECOLOGY.

Weight of Children at Birth.—DR. THEOPHILUS PARVIN gives the result of an extended series of observations made in the Philadelphia Hospital, by Dr. R. J. Phillips, one of the residents. The average weight of five hundred male children is 7 lbs, 7.956 oz.; that of five hundred females is 7 lbs. 1.726 oz., and the average of the thousand is 7 lbs. 4.891 oz. as the weight of the new-born infant. It would be perfectly safe then to say that the average weight of a male child at term is seven pounds and a half, and that of a female is a little over seven pounds. In only one of the thousand cases did a child weigh eleven pounds, This was a boy; the heaviest female child weighed a little over ten pounds.—*Med. Bulletin*, May '84.

Fetus Retained in the Uterus for Twenty-four Years.—G. N. WOOLEY relates the following interesting case: A German woman, of medium size, the mother of four children was taken with pains in the lower part of her bowels in the latter part of April, 1861, having then arrived at the natural term of gestation. The nurse decided that the woman was in labor and a physician was sent for. The pains abated on his arrival and although he waited all night with the patient, they did not recur. In the morning, without making a careful physical examination, he abandoned the case as one of *spurious pregnancy*. Four or five days afterward she had convulsions and fever. The convulsions soon ceased but the fever continued for three weeks. Then her health improved somewhat, but it was a year before she enjoyed ordinary health. No phenomena of special note occurred and her health continued good until November, 1883, when she had an attack of colic with constipation. Dr. Worley first saw her on the twenty-eighth day of November, when she seemed to be in great agony, with a constant desire to

pass urine and evacuate the bowels. On examination per vaginam, she seemed to suffer intensely, so that it was impossible to make a satisfactory examination. A week passed without alteration. The diagnosis made was that of prolonged retention of the fetus. The patient died Feb. 27, '84. On post mortem examination, there was found in the uterus the skeleton of a fetus, but no trace of the soft tissues at all. All the bones were found unaltered.—*Fort Wayne Jour. of Med. Sci.*, April, '84.

Twin Birth with Membranes Intact.—DR. A. M. PRATT reports the case of a patient to whom he was called in a hurry, the statement being that the child was already born. He found the patient on her knees on the carpet, the baby crying lustily. She said that she had had no pain, but not feeling well had risen and was walking to and fro in the room. Suddenly she had a furious pain—so severe, that she could neither step nor stand. She dropped to the floor and before the pain ceased the child was born. While Dr. Pratt was ligating the cord, she remarked that the after-birth had come. On examination, however, it proved that what she supposed to be the after-birth was really a second child which was enclosed in intact membranes.—*Pacific Med. and Surg. Jour.*, July, '84.

Fetal Nutrition.—DR. JEROME A. ANDERSON claims that the time-honored theory of fetal nutrition is all wrong. He asserts that this is accomplished not through the placental circulation but through a process of endosmosis and exosmosis, taking place primarily from the engorged tubal and uterine walls, later from the amniotic fluid from which nutrient material is taken up at all times by the external surface of the embryo. He claims, however, that after the first month the amniotic fluid is taken into the intestinal tract, and nutrient matter is assimilated and distributed to the fetal tissues as in post-natal life. In accordance with this view the function of the placenta is purely respiratory.—*Am. Jour. of Obst.*, Aug. '84.

Extra-Uterine Pregnancy.—LAWSON TAIT records five cases of extra-uterine pregnancy in which he operated immediately or very soon after the rupture of the sac. In four of these cases the patient recovered, and in the other he thinks that a favorable result might have followed, if the patient had been seen a little earlier.—*Brit. Med. Jour.*, June 28, '84.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY

Stated Meeting, May 27, 1884.

Dr. Hardaway presented a patient affected with Xanthoma.

FOREIGN BODY IN ALIMENTARY TRACT.

Dr. Bryson.—About two months ago a very strong robust man was sent to me by *Dr. Hardaway*. I had occasion to operate on him; took off a large hemorrhoid from the anterior aspect of the rectum, and he recovered very well. He came to me on Friday morning, as white as a sheet, in a cold perspiration and high state of perturbation, and told me that he had swallowed his false teeth during the night. About one o'clock in the morning he awoke with a strangling sensation, got up and took a glass of water and went to bed and went soundly to sleep. He awoke in the morning and found that the plate, in which was fastened two teeth, had disappeared from his mouth. He remembered distinctly that he went to sleep with the plate in his mouth; he searched the bed and couldn't find it, and naturally concluded that he had swallowed it. This was between eight and nine o'clock in the morning of Friday; they had been swallowed at one o'clock in the morning. He complained of a little distress in the pit of the stomach; he described the teeth and plate very accurately to me, and said that the ends of the plate were sharp, and one had a part of a ring on it which went around one of the teeth about two inches. He said the length was two inches, and he described the breadth as being one inch from the tip of the teeth back to the posterior part of the plate. It was semi-lunar in shape and, he said, ragged at the anterior extremity of it. He had had his breakfast, and his wife had suggested that he should take a dose of castor-oil with the hope of removing the teeth as rapidly as possible. He declined to do that until he saw

me. I recommended him to go home and eat a large meal of bread and milk, and gave him a slight opiate pill, intending to render the bowels somewhat sluggish, not exactly constipated. This he did; he ate freely of bread and milk, and took his pill three times a day, which made the bowels rather sluggish, the feces becoming more consistent, though he had an action each day. This morning at 8 o'clock, that is 103 hours after the plate was swallowed, he passed this plate. I directed him to watch his feces carefully, and bring the fecal mass along with the plate, as I wanted to see the shape of it, but he forgot to follow out the direction. He described it very well; and, by the way, I will say he was at his business all the time. He describes the mass of feces surrounding the plate and teeth as being fusiform in shape, and covering the whole of the plate except the points of the teeth and the distal extremities of the plate. I will say that the plate is just two inches in length and an inch at the broadest portion of its breadth. From the tip of the teeth to the posterior edge is rather more than an inch. He experienced no pain whatever. I attempted, by seeing him frequently, examining him and asking him about the sensations he experienced, to follow if possible this plate along through the bowel as well as I could, but it was impossible to do it. The man had no sensation at all during the passage through the small and large intestines, but he recognized the fact of the passage of the plate through the anus at once; at that point only when it passed did he experience any sensation. This plate of course went through the pyloric orifice of the stomach and through the ilio-cecal valve and through the whole length of the intestine. I think it would have passed earlier, if I hadn't given him medicine to render the action of the bowel rather sluggish. This gives me opportunity also to say what I have thought for a long time, that impaction of the bowel is due to a large extent, if not entirely, to disorder of the walls of the bowel itself. That was a considerable mass to pass through the bowel; certainly in a portion of the bowel it was necessary for it to pass endwise, but as long as the bowel is in a perfectly good condition without any disease affecting its muscular coat, I think the chances are that obstruction will not readily take place.

Of course I was ready at any time to open the abdomen in case there was evidence of impaction; but I believe in a case of that sort that I would have found very great difficulty. There would have been more or less inflammatory action—more or less localized

peritonitis at any rate, and on opening the bowel itself, undoubtedly the fluid feces would have escaped to a very considerable extent. I think an operation would be decidedly unfavorable in a case of that sort.

Dr. Todd.—Did any blood follow the passage of the plate?

Dr. Bryson.—No, sir; none except what might have come with any considerable fecal mass, because he had been operated on recently for hemorrhoids, and there was a young cicatrix.

Dr. Prewitt.—The doctor followed the rule that is now generally advised in regard to foreign bodies that have been swallowed, giving the patient dry food or food that is likely to make solid fecal material so that it incloses the foreign body and facilitates its passage. This looks rational enough at first glance, and yet absolutely it has very little influence in the matter. The real difficulty in the passage of such things is in the small intestine, and there is no such thing as solid fecal matter in the small intestine; fecal matter does not become impacted until it reaches the colon, which is amply large enough to allow the thing to pass. It is true it would have been unfortunate for this patient to have had a diarrhea. After the foreign body has reached the colon, it is certainly better that the bowel should be moderately constipated, that the foreign body should become enveloped in fecal matter as it passes along the colon. It would be better possibly if it were in the small intestine enveloped so it would be smooth and pass along, but such is not the case; and the real difficulty in these cases is in the passage of the foreign body through the small intestine; there is where it is likely to be lodged; and there is where there is no possibility of enveloping it in solid masses of fecal matter, so that the teaching to give the patient bread and substances that go to make solid fecal matter is not a very important matter after all, since very likely if they go safely through the small intestine they will pass through the large intestine anyhow.

Dr. Tuholske.—Dr. Prewitt has simply anticipated me in that statement. I remember very distinctly reading Bryant, who lays great stress upon this, and recommends that no laxative should be given in such cases but rather opium; and refers to the cases of English counterfeiterers or men who pass counterfeit money, and who being caught swallowed the money, and says that they never take a laxative, but eat such food as tends to constipate so that the coin will be enveloped in fecal masses, and in that way pass off

without the counterfeit money being detected. I agree with Dr. Prewitt. I cannot see the possible influence that this sort of diet can have upon the passage of the foreign body through the small intestine; there is no solid matter in the small intestine; no such a thing as enveloping the body in it at all.

Dr. G. A. Moses.—It is my impression that the value of the dry food given immediately would be, that in the first place it would envelop the mass in the stomach and thereby enable it to pass the constrictor of the pylorus; and then the general state of constipation of the bowel itself is advantageous. It is a very singular thing that a large and irregular mass such as this should pass successfully through the convolutions of the small intestines, when oftentimes a very trifling object may cause very serious complications. I have had two cases bearing upon this point. In one a patient took a hasty drink one morning and swallowed a large plate containing, I think, four teeth and not situated close together, all separated. On the plate was quite a large old-fashioned hook of gold passing behind each posterior molar, one of the hooks being broken. He was aware of it when he swallowed it; the plate was just within reach of a very large pair of esophageal forceps, but was so lodged that at first it was impossible to seize it. After a great deal of effort I succeeded in getting it into such a position that I could seize it and in removing it. The other case, which is particularly interesting as illustrating the fact that a small mass may be very harmful, occurred in a child which had a severe attack of measles and subsequently suffered with rectitis. The little fellow was about four or five years old, and as he was convalescing, summer coming on, his mother took him to the sea-shore, and he was there all summer. His mother brought him home in the fall, and in recounting the adventures of the summer she stated that the little fellow had swallowed a piece of money, she didn't know what size it was, and never discovered whether the child had passed it or not, but for several weeks he had been decidedly constipated. She stated she would occasionally use an enema; sometimes this would bring with it more or less feces; at other times it wouldn't return for several hours. The child was troubled with frequent attacks of pain. So far as his general health was concerned, it had improved. He was fleshy enough, but was so much disturbed by the trouble in his bowels that I made an examination. There was so much pain when I examined with the finger that the

examination was futile, but with an ordinary grooved director passed up a short distance into the bowel I could feel that it came in contact with a hard body which I could move. I went for assistance and gave chloroform; and then passing in my finger dilated the sphincter, and found a constricted point in the gut; and just above it I could feel with the point of my finger a small flat mass which moved up and down like a valve. I made a little incision and with a pair of forceps withdrew the obstructing body, which proved to be a three-cent piece. Undoubtedly an inflammatory condition of the rectum had left some constriction, and this piece of money fell so as to form a complete valve. When water was injected, if the coin happened to be upon its side the water would be discharged, otherwise the enema would be retained for a while.

Dr. Hardaway.—The reports before medical societies and journals are full of these cases of the passage of foreign bodies which result favorably. I would like to know whether any of these cases of obstruction from foreign bodies result fatally.

Dr. Prewitt.—A coin would rarely give any sort of trouble. If it once passes the pylorus it will usually go throughout without much trouble; and in fact most bodies which pass through the pylorus will go through pretty readily the entire length of the bowel. I remember a case of a child in the northern part of the city, in which the father, who was a physician, informed me that his child had swallowed a shawl-pin with a black bulb on the end, the other end being sharp. Now, of course, if that had started down the bowel with the small end foremost, it might very readily have cut through; but, as a matter of fact, peristaltic action of the stomach turned the large end toward the pylorus, and it passed through in that way. In the stomach such an object might be turned over very easily; but it usually starts right through the pylorus. I would like to take exception to Dr. Moses' remark about the foreign body being inclosed in a mass of solid matter in the stomach and thus passing to the small intestine. As a rule we wouldn't expect to find a foreign body in the stomach enveloped in a mass of bread or anything else, and passing out of the stomach in that way. It would be a very remarkable condition of things if it did. Very small particles of undigested matter may pass through the pylorus, but it is not probable that a mass of material that would envelop a body like that would pass through. As a matter

of fact I presume it never has occurred. Of course foreign bodies do occasionally lodge in the bowel, get caught and act as irritants, and sometimes lead to inflammatory suppuration, pointing externally and opening spontaneously. Pieces of cabbage and other things have produced the same result.

Dr. Scott.—I think we have all witnessed in cases of diarrhea large quantities of undigested food, such as potatoes and apples, which children have swallowed in pretty good sized pieces. I have recently had a case in which a child perhaps eighteen months of age swallowed a common carpet tack. The mother had been putting down carpets, and the child had been placed upon the floor; and as children take up everything, this child found the tack, and putting it in his mouth swallowed it. The mother showed me the length of the tack, and told me she wanted to give it a dose of castor-oil but did not. In this case I gave an opiate so as to make the bowels sluggish and the feces as consistent as possible; and in about 24 hours afterwards my little patient passed the tack.

Dr. Prewitt.—I want to say in explanation, I don't mean to say that articles of food may not pass in solid lumps, but that in the main we would certainly not expect a foreign body to become enveloped in the food in the stomach, because the food becomes liquefied there.

Dr. G. A. Moses.—When a foreign body is in the stomach, it may be enveloped in a pultaceous, semi-liquid mass and then be passed through the pylorus, the mass of food tending to protect the parts from the body. I don't suppose that in the stomach this body would be enveloped in a protecting mass, but that the contents of the stomach, if there was sufficient food there, would allow it to pass through with less danger of injury than if the stomach were empty. I think in this way it would tend to protect the parts.

Dr. Bryson.—What we see in the dissecting room of the condition of the stomach and small intestine and in post-mortems under any circumstances is not to be taken as the condition which exists during active digestion in perfectly healthy subjects. It is by no means settled that the food passes in a perfectly liquid state from the stomach into the bowels, particularly if starchy food be eaten. This food doesn't digest in the stomach; it may be liquefied, but it is not digested until it gets to the small intestine; and in fact the object I had in giving starchy food was to keep the small intestine

well filled. Dr. Moses expresses my idea exactly; it was to have this body if possible enveloped in a mass of undigested food, I didn't suppose that the masses of food would necessarily attach to it, but I supposed they would go along with it, and thus I directed the man to eat very largely of bread and vegetable food, the object being simply to distend the parts as much as possible with the food whether solid, semi-solid or liquid. I was trying to look up and determine to-day where I had seen some observations made by a French vivisectionist, who made some openings into the stomach and watched the food passing from the stomach into the duodenum; he observed it as well as it could be observed through the opening. I think his observations were published in the *London Lancet*. He declared that he saw large masses of food passing in an undigested state into the small intestine. As a matter of fact I believe, as every one knows certainly, that most of the digestion goes on in the small bowel. I think it is a very great advantage to have a foreign body accompanied by a great deal of food whether it is digested or not.

The doctor remarks very correctly that we do see very large pieces of undigested food passing from the bowel in grown people. I attended a case in company with the late Professor Hodgen some years ago at St. Luke's hospital. We had given him a six grain quinine capsule, and he passed the quinine yet retaining the same shape in which it was administered; the gelatine capsule only was gone; and in breaking up this quinine we found the centre perfectly dry; it was surrounded by a coating of mucus. If any one will take the trouble to examine the feces of a person who lives the ordinary life, who eats his meals hastily, and will take the trouble to drop a little tincture of iodine on the feces, such a man ordinarily passes a large quantity of undigested starch which will appear as a gelatinous mass.

I believe that this plate, this foreign body, if it did not pass out enveloped in starchy food, at least passed out in semi-fluid food. The greatest difficulty in all these cases is experienced at the ileo-cecal valve, but foreign bodies may pass down and cause trouble in the rectum. As a matter of fact the smaller foreign bodies generally cause trouble at the ileo-cecal valve, getting into the vermiform appendix and there encountering some previously existing disorder of the bowel. If there is any trouble in any part of the structure of the bowel when this foreign body reaches the place, it is apt

to set up an inflammation, a localized enteritis, and it is apt to be arrested at that point.

Dr. Kingsley.—I am rather inclined to think that at the time that this passed out of the stomach that organ was comparatively free from solid matter, or at least that it passed out with the last of the food. I remember that in some experiments that were performed by Dr. Beaumont he introduced a thermometer into the stomach through an opening. This was carried gradually down to the pyloric orifice, seized and carried for a short distance, and then returned; each time the thermometer came around it passed a short distance and was returned. From that experiment the conclusion has been reached that solid matters pass out of the stomach to the pyloric orifice, and after this gets tired of refusing them, they are passed through it after the fluid contents have been emptied.

Dr. Briggs.—Dr. Hardaway asked for unlucky cases of foreign bodies. I saw in consultation this last winter one or two cases of that character, and one which promised to have an unlucky ending, but the patient recovered. The circumstances were such as to lead to a very grave prognosis. This patient was a child two years old, a bright intelligent active boy who had swallowed a fragment of a broken up school slate of his sister. These were rather minute fragments so far as we could learn, but he was thrown into a condition which caused very great alarm and lasted from a week to ten days. I was not the regular attending physician, but saw him in consultation about four or five days after the foreign substance had been swallowed. We had good reason to believe that these fragments were minute, not more than half an inch in the largest diameter, but having very irregular and sharp edges. The question with us was whether they would cause the very serious disturbance which resulted, and we could only draw the conclusion that possibly in the pylorus or at the ileo-cecal valve or some other portion of the intestines the fragments had inflicted wounds with the sharp edges and thus caused the febrile reaction; the temperature had run up to 105°. When I saw the case it seemed to be very alarming, the high temperature was recurrent, not remaining high at all times; fortunately this child made a very excellent recovery.

Dr. Shaw.—I fully agree with the views advanced by Dr. Prewitt. I do not believe it is possible to give any article of food, unless it be milk, that will envelop a foreign body in the stomach. The stomach is accustomed in the first place to pass through the pyloric

orifice the food in a liquid or semi-liquid state. After that which is liquefied has passed, there seems, as Dr. Kingsley has remarked, to be a desire to rid itself of some of that which is more solid or that which is partially digested; such portions pass off into the intestines and through to the anus unless they be articles which can be digested in the intestine. The case that first called my attention to this matter was that of a child about three years of age; he had swallowed a large carpet tack, somewhat similar I presume to that which was swallowed by Dr. Scott's patient. About two days afterwards he swallowed a screw; it was a new bright screw about an inch and a quarter in length, and I was considerably alarmed in regard to this little fellow, because in the first place the tack might catch very readily at some point, and if it did the screw would in all probability lodge at the same point and offer a very considerable obstruction. Now in my treatment of this case I acted upon the belief that we cannot give any material as food that will envelop a foreign body in the stomach and protect the pylorus or any other portion of the alimentary canal in its passage except milk. I gave this child milk to drink, and followed it with acid so as to hasten its coagulation. In two hours I gave a large dose of castor oil; a few hours after that I again administered milk, then again acid, and followed that with oil. In this case the tack was passed, enveloped in a very small sized piece of tolerably hard feces; the screw was enveloped in a curd of milk; and my experience with this case leads me to believe that it is possible to envelop with a curd of milk a small foreign body in the stomach and have it passed in that condition. In fact I know it is possible; I have had ocular demonstration of the fact, but I do not think that by giving any quantity of bread or potatoes or any starchy material whatever we can envelop a foreign body in the stomach. It is utterly and absolutely impossible, and furthermore, I believe that in passing through the small intestines a foreign body will be the last portion of the contents of the intestines that will pass during a given period. Say, for instance, we have in the stomach a given quantity of food and with it a foreign body; I believe that if the food is at all undigested it will, in its passage through the pyloric extremity and ileo-cecal valve assist the escape of the foreign body and by the vermicular motion of the intestine the foreign body may be passed with the food that is undigested or imperfectly digested. When a foreign body has reached the large intestine, then only is it possible for it to become enveloped in a mass of fecal matter.

Dr. Lemoine.— I think I can relate a case of this kind that seemingly militates against what Dr. Shaw has stated in relation to foreign bodies in the stomach. The patient was one of our city engineers; I do not know whether he is still living or not. In his childhood he swallowed the handle of a toy china cup. He came under my charge years after he had grown to manhood, complaining of pain in the stomach whenever it was empty; he had been troubled in this way for fifteen or twenty years; he was entirely relieved of the pain after taking food, and this relief continued until the digestive process was completed so far as the stomach was concerned, when he was compelled to take food immediately in order to relieve the suffering: that was his constant experience. There was no other way to explain this except upon the theory that when the stomach contained food the foreign body did not produce any irritation, for as a matter of course the foreign body would be included in the digesting mass, and be held away from the walls of the stomach. In this way we may have a condition or process resembling that which obtains in ulceration of the stomach—a gastric ulcer might be caused in this way. It is well known that gastric ulcers, in some locations give rise to pain directly after the ingestion of food, in other locations to the same effects, not immediately but hours after the food has entered the stomach, after digestion has passed but a certain degree. In this case I drew the conclusion that when the stomach contained food possibly there was no irritation from the foreign body, because the stomach would then have other material to act upon. There were no symptoms of gastric trouble at any time, except this pain, when the stomach was empty.

Dr. Bryson.—Dr. Kingsley and Dr. Shaw say that solid masses pass from the stomach last; this is rather in favor of the view that these foreign bodies may pass with solid material; certainly there is nothing more solid in the stomach than this, and if the pylorus is going to reject everything but fluid food until the last, and let all out except the solid portions, there is more probability of the foreign body being enveloped in more or less solid portions of the food.

Dr. Glasgow.—I have listened to this citation of cases and from the reports made, it would appear that the passage of these foreign bodies through the alimentary canal is a most harmless pro-

ceeding in children. Dr. Hardaway asked if there were any fatal cases. I remember one case which proved fatal some years ago, in which the son of a brewer here in eating oysters swallowed something—it was never known whether it was a piece of oyster shell or a piece of solder, it was something of that character—and he had as a result an inflammation of the bowels which caused death. Whether this substance got into the vermiform appendix or in what portion of the bowel it was is a question I cannot answer. This fatal case occurred here in this city. In listening to this discussion, I have thought whether in administering opium in these cases, it was so much to produce sluggishness of the bowel as it was to allay the spasm that would occur from any irritating substance passing through the intestine.

Dr. Shaw.—About two years ago Dr. Hodgen operated on a man on Laclede avenue, for obstruction of the bowel caused by swallowing a date-seed. The man died.

Dr. Previtt.—The special point in this discussion raised by myself was this, whether by the use of a particular character of food we can hope to invest the foreign body in such a way as to facilitate its passage. As a matter of course smooth rounded bodies usually pass without difficulty, at any rate if not too large; if very large they usually lodge at the cecum, the opening of the vermiform appendix or some where like that. Now as a matter of fact we cannot hope by any sort of food to so envelop a foreign body in the stomach, or in the small intestine, as to facilitate its passage. While it is true that the solid material would pass last, as a rule, successive waves of fluid coming in behind and distending the bowel would certainly have a tendency to carry the foreign substance along and facilitate its passage in that way, but not by enveloping it in matter, as is the case in the large intestine, where the fecal matter actually surrounds it, incloses it and covers up its inequalities and renders it practically a smooth body. That is the observation I made; I do not think there is a case on record where solid fecal matter has been found in the small intestines; nor do I think that solid matter ever envelops these foreign bodies in the stomach that was in a condition of active digestion. Semi-solid material that had undergone partial digestion, I don't think would so envelop the foreign body as to carry it through the pylorus; that particles of matter are carried through in lumps is undoubtedly true, and, as Dr. Kingsley suggested, they are the last

things to pass through the pyloric orifice; they are rejected for some time but finally they do succeed in passing, but I do not think that they would ever envelop a foreign body in the way that has been suggested. If we could take a lot of mashed potatoes and surround the foreign body so that it would pass through the pylorus, then we might hope to do some good for our patients by filling the stomach with mashed potatoes; but it is certainly a violent supposition that such a thing should occur. We cannot hope by feeding a patient with solid food to accomplish anything; I think it would be advisable to make a patient drink largely of milk and other things so that the bowels would not be absolutely empty.

Dr. Homan.—Referring to Dr. Lemoine's case I think it is very clear that the stomach can acquire toleration of foreign bodies. I remember having seen more than one stomach of beeves opened, and in several instances have seen ten-penny nails and pebbles, the nails having every appearance of having been in the stomach a long time, being quite polished and more or less rounded. Of course the cattle were being fattened, and nutrition being carried on; this would show that there was at least no very serious disturbance. I think these cattle, moreover, were fed on bran, grain, and hay. Of course that food would be of the most favorable nature to envelop the foreign bodies and carry them off.

Dr. Scott.—Many of us have seen those large balls made by hair in the stomach of animals which have accumulated by the animals licking themselves. I have seen in one stomach five or six balls as large as my fist, perfectly round and coated with mucus.

Dr. Bryson.—I believe that the effect of opium is that it renders the bowels sluggish and also renders the digestion sluggish. So far as milk is concerned, it is usually digested in the small intestine; then there is another point I want to mention, as I consider it important. Although this mass was partially enveloped in fecal matter when it passed out of the anus, the ends were sticking out and the teeth were sticking out; there was more or less free ragged edge which could scrape and scratch the intestine, so that the fact seems to me of practical importance in regard to the passage of these things by a perfectly healthy bowel. Where the alimentary tract is in a healthy condition, it is probably able to manage these things so as to get them through in safety. It is a fact that a very small foreign body will sometimes cause a great deal of disturbance, and

in these cases it is probable that there was previous to the passage of the body some slight irritation.

LYMPHOMATA.

Dr. Previtt.—I have here, Mr. President, some tumors removed from the neck of a man. This bottle contains tumors which I removed from this patient a year ago. and the other contains tumors, which I took a few days ago. It was a case of lymphoma; the patient is fifty years old; he came to me just a year ago. A mass of tumors extended from the ear to the clavicle, and they were confined to the left side, which is usually the case with lymphomata, which usually occur in adults, although they are occasionally seen in young children. They are very distinct of course from cases of tuberculosis, enlargement of the glands, inflammatory enlargement, etc. They are painless and of rather rapid growth. I made an incision extending from the lobule of the ear to the clavicle and extending around to the chin behind the median line, and amputated this large mass which extended down to the blood-vessels, bringing into view the carotid arteries, jugular vein, etc. He recovered very well at that time, and remained well for some time. A month or two ago he wrote me that the tumors were recurring and growing rapidly. I wrote him that probably he had better have the new growths removed. He came down on last Friday and I operated on him, removing the mass of glands you see here. These glands were developed below the point of those which I removed before. The upper portion of the neck was perfectly clear and free, the cicatrix being very perceptible, but below this there was a large mass of glands which extended to the clavicle and below as far as I could determine. They had now appeared upon the right side and extended very far down—to the clavicle, and seemingly below the clavicle. Upon that side were a number of enlarged glands very perceptible to the sight and to the touch. I made an incision under the deep fascia and under the sterno-cleido-mastoid muscle; some of the glands were projecting behind, some in front, and some bulging it out. I made an incision and cut them out down to the clavicle, digging them out from under the sterno-cleido-mastoid muscle behind and carrying the incision down until I got down behind the clavicle to a point where the inspiration and expiration movements of the apex of the pleural cavity reminded me that I had gone far enough and had bet-

ter retreat. Whether there were any glands any further down or not, I don't know. I took out quite a large gland below the level of the clavicle; and at each inspiration and expiration the blood exuded and ran down in a pocket-like portion, as though with each inspiration a quantity of blood welled up from the subclavian vein, but it was only the accumulated fluid. Still the rise and fall were perceptible; and besides that there was danger of not getting thorough drainage, and possibly cellulitis setting in, and it occurred to me that if any trouble should arise in that way, one side was enough to deal with. So I desisted from any attempt to remove the glands upon the right side. I washed out the parts very carefully, taking antiseptic precautions, and the man never had any rise of temperature beyond $99\frac{1}{4}^{\circ}$. I think it got up to that on the second day, but this is the highest point to which the temperature went; to-day the temperature is normal. He has been talking within the last day or two about going home; I think it is not very prudent for him to start as yet. Of course I have redressed the parts, once on Saturday for the reason that at one of the glands just below the maxilla, which I had removed above the line of the first incision, there had been some little bleeding. I had tied one or two vessels and perhaps twisted one which seemed to have bled a little. There was considerable oozing from that point, and on Saturday I replaced the dressing in order to get rid of the oozing of blood, since then the wound has not been touched. I don't propose changing the dressing until there is reason to believe that the parts are thoroughly healed.

Dr. Mulhall.—Did you have any reason to believe that the glands of the mediastinum were involved at the time of the operation? Did you examine the thoracic condition?

Dr. Prewitt.—No, sir; I did not, but I think they will be involved eventually. I will only say that I suppose, so far as the glands in the cervical region are concerned, they are perhaps involved, but it is almost certain that the mediastinal glands will be involved, and that the disease will probably kill him, although I think that by removing these glands we give him a better chance. I remember seeing a case of this character which was under the care of Professor Lankford; it afterwards fell into my hands. In that case the adenoid tissue of the pharynx

and tonsils was involved as well as the glands elsewhere, and the man was nearly choking to death. In this case we removed the glands; some months afterward he came back to me and I found that the growth was encroaching again upon the throat in such a way as to interfere with his breathing and swallowing. I found that it was sprouting out very irregularly and that the adenoid tissue of the eyelids was involved, and glands of the neck were more or less involved, and glands in other parts of the body, I think. In that case I took a stout gorget and gouged out the material from his throat, using considerable force to do so, and scraped all the tissue that I could possibly scrape out. I cut into this mass and scraped it out; then I turned up the eyelids and scraped out these parts; there was a quantity of the same material on the under surface of the eyelids. The man was very greatly relieved and went home, and I had a letter from him a few months ago in which he stated that the trouble had broken out on his fingers, and that since that time all the rest of his trouble had disappeared and his finger was getting well; it was a very extraordinary statement, but that is what he stated. I would say that I put him upon iodide of potassium and Fowler's solution and iron, which he took persistently for months. How far this influenced the growth I don't know. The other patient was also placed upon iodide of potassium and Fowler's solution for some time, but he became tired and neglected taking them for some months back; whether or not anything could be accomplished in his case by this treatment I don't know. I thought after he got well from this operation I would take out the glands from the right side probably, and in the mean time put him upon iodide of potassium in the hope that it might prevent the development of the glands elsewhere. This trouble does not occur in all parts of the body, as we would expect in a case of sarcoma, for instance, or some other growth, but usually it will occur in other glands. This looks as if it were a diathetic condition of the system, a condition which did not involve the glands alone; but I am inclined to think that the man is better without these tumors.

Dr. Tuholske.— I believe that the opinions of surgeons are pretty evenly divided on the subject of the advisability and propriety of the removal of the lymphomata; and those who have operated a great many times, and probably no one has operated as

frequently as Dr. Prewitt, almost all make a very unfavorable prognosis with the exception of Dr. Prewitt, and they are rather less disposed to advocate operative procedure. Almost all the cases have terminated fatally, and for that reason they are looking about for some other remedy, and arsenic is the one that has been claimed as being of the most positive benefit in the stopping of the growth. Billroth seems to think that it is a valuable remedy and uses it hypodermically, and so does Esmarch, who seems to be rather enthusiastic in regard to the use of arsenic in that sort of growth. It seems to me that when we are dealing with a large number of enlarged glands about the neck, whether we expect to cure the disease or not, it is still proper for us to remove them.

Stated Meeting, May 13, 1884.

LUPUS VULGARIS.

Dr. Hardaway.—I present a patient with a very extensive lupus vulgaris, involving the nose and the whole side of the face. He presents in fact the typical features of lupus vulgaris, I think possibly of two years standing. The only points that I wish to make are these: Where we have lupus it is the object, of course, to gain a good result, as good cicatrization with as little scar as possible. In this case we see a very good recovery. I suppose the treatment has lasted three months or something like that. The treatment consisted simply in the application of unguentum vaselini plumbicum in a thin layer over the skin. There were a few places where it was necessary to use the nitrate of silver. I kept the parts well covered with the lead ointment, and used internal treatment, which consisted of cod-liver oil in teaspoonful doses at first, increasing the dose until it reached 12 or 14 tablespoonfuls. The gentlemen can examine the condition of the cicatrices and you will see that the recovery has been pretty good. If you had seen him in the beginning you would hardly have believed that he could have recovered in so short a time. The whole upper portion of the face was one mass of nodules and ulcerations and some of them were very difficult to deal with.

MALIGNANT DEGENERATION OF ULCERS OF THE LEG.

Dr. Prewitt presented two specimens, one of epitheliomatous, the other of sarcomatous degeneration of old ulcers of the leg. For full report of these cases as given to the American Surgical

Association see *JUNE COURIER* p. 516. Dr. Tuholske recalled a case of sarcomatous degeneration of ulcer of the leg in which he had made an amputation four years ago.

TUBERCULAR EPIDIDYMITIS.

Dr. Bryson.—I have a specimen to present which may be of some interest. The history of this case is this: About ten years ago a very intelligent gentleman who described his symptoms very well, in fact one of the most accomplished civil engineers in this country noticed in his right testicle, if I recollect aright, in the location of the epididymis an enlargement which grew gradually, causing very little pain; it was nodular and irregular in outline. This finally suppurated and discharged through the scrotum. The suppuration continued for a month at that time and he went to Germany; while abroad the suppuration ceased and he came back much benefited. Within a year the other testicle became involved in the same way, went through the same process and finally healed up. About the time the fistulous opening healed he began to experience sensations in the neck of the bladder at the end of micturition, which were increased by movement. There was a little bleeding, which bleeding was increased by movement; on taking any unusual exercise these symptoms were aggravated. Dr. Hammer saw the patient a number of times and examined him for stone, always with negative results so far as finding any stone, but always exacerbating the physical symptoms. Later on he consulted the late Professor Hodgen, who also sounded him for stone with the same result, so far as finding stone was concerned, or not finding one, and so far as the physical symptoms following were concerned. When I saw him in consultation he had very decided symptoms of pyelitis; there was pain in the region of the left kidney; there was passage of a large quantity of urine of low specific gravity loaded with pus and with a sufficient amount of albumen to correspond to the amount of pus. Under the microscope there was a good deal of epithelial detritus such as we would find either from vesical or pyelitic trouble. The patient exhibited almost no signs so far as the rectum was concerned, no symptoms so far as the bowels were concerned, with the exception of a gradually decreasing appetite and ability to digest food. He wasted, became dropsical, and finally died. On making a post-mortem we found the left kidney completely honey-combed with abscesses; a good portion of the secreting structure was destroyed. The blad-

der was very decidedly thickened, very much congested. The rectum also was very decidedly hyperemic. The entire peritoneum was covered with miliary tubercles. I thought the specimen was of interest for this reason, that, looked at clinically, we find the tubercular trouble clearly defined, and we find the tubercular trouble commencing in the base of one epididymis, in the tail of the other epididymis, and gradually finding its way to the neck of the bladder, thence from the bladder to the ureters and from there doubtless to the kidneys. I believe that it was possible to make a diagnosis of tubercle of the testicles with a tendency to continue upwards. We might arrest its progress by removing the testicle. It is a question which to my mind deserves consideration. I think for my own part that in order to prevent the spread and progress of this disease a man might very well afford to lose one testicle. Another interesting point about this case was, that, notwithstanding this decided change in the mucous membrane of the rectum, there were no rectal symptoms whatever; the patient never complained of a dysenteric condition. Another interesting question in this case would be whether the urine would show the presence of tubercle bacilli.

Dr. Prewitt.—I have met with one or two cases of this kind in my practice. I know a married man who about two years ago first began to be affected with tuberculosis in both testicles, involving however, especially, the epididymis, and extending around up the cord. One testicle had suppurated more or less, but this had ceased, and there was, at the time I saw him, no suppuration whatever; but the epididymis upon both sides was involved, and upon the left side especially it was over the testicle itself, and the characteristic nodular tuberculosis extended up the cord also. This man about a year ago married, and he tells me that so far as the sexual feeling is concerned he notices no difference whatever. His general health is good, but to get rid of the disease we will have to castrate him. I am not sure but what Dr. Bryson has seen this case. I believe, as Dr. Bryson has suggested, that the removal of one testicle would be advisable to prevent the further spread of the disease, especially if performed early enough, before it had extended beyond the limits of operative procedure.

Dr. Bryson.—Dr. Prewitt reminds me of one thing that I forgot to mention, that after the second testicle was affected and had healed, his wife bore him children.

Dr. Tuholske.—What was the age of the patient when the testicle first became affected?

Dr. Bryson.—I think he was about 46 or 47 when he died; that is my recollection. I have now under treatment a case apparently of primary tuberculosis of the testicles in a boy 19 years old. I have observed this patient for the last four or five years, I think.

Dr. Tuholske.—I asked the doctor the question because tuberculosis of the testicles, at least primary tuberculosis, is a disease of the very young, and it does not occur later in life; as a rule it occurs in the very young or in early manhood. This very interesting case would at once suggest the treatment by the removal of the affected testicle. In this case the disease seems to have taken the course that is laid down as the classical course for the spread of tuberculosis. I believe in these cases the indications are for the removal of the tuberculous testicle. I think that if I had this trouble I would want it removed.

Dr. Bryson.—In connection with that very point, Mr. President, I perhaps didn't state distinctly enough that this gentleman was a very intelligent man, and I frequently conversed with him in regard to the development of any other symptoms preceding the first appearance of the tubercular epididymitis. I questioned him very closely, and he was a very intelligent man, and very clear in regard to his memory. I think he related his story to me very clearly, and he did so two or three times, always with the same detail, and I couldn't make out that there was at any time any symptom to indicate any other trouble in the genito-urinary tract.

Dr. Prewitt.—There is one point, Mr. Chairman, in regard to the age of the patient; I would say that I saw a man about 60 years old not a great while since, with a condition which had perhaps originated from a slight injury to the left testicle. This at one time had been followed up by induration and suppuration, and a year or more afterwards, perhaps, the other testicle became involved in the same way. When I saw him there was a sinus connected with both of them. I looked upon it as tubercular inflammation, and he subsequently died. In that case it was too far along, doubtless, to have effected anything by the removal of the testicle; although I suggested at the time that possibly something might be done by removing it, but he never consented.

Dr. Bryson.—I have not experience enough in tubercular

troubles in general to say, but my observation has been that the prostate gland, as Dr. Tuholske suggests, is selected as the point of tubercular trouble. I believe that we would gain a vast deal if in post-mortem investigations the genital and genito-urinary tracts were more frequently examined; and I believe that we would perhaps find tubercular trouble very frequently around the prostatic urethra, much more so than is generally supposed. The sensual tendency of tubercular patients is pretty well known. I have had some tubercular patients, patients with tuberculosis of the lungs, who were well known to be excessively amorous, so that they kept up intercourse and sometimes masturbation until within a few hours of death; and it has occurred to me that this excitability of the genital organs was, certainly in a portion of these cases, due to the tubercular trouble of the prostate gland.

Dr. Homan.—This patient was not over 40 years of age when he died.

Dr. Tuholske.—I think it is the observation that primary tuberculosis of the testicles is a disease of the young.

Dr. Funkhouser.—I have a case now under observation which is almost considered beyond treatment. The patient has not been able to attend to his business for a year and a half; the left testicle has been tubercular for some considerable time. He is suffering from Bright's disease and also from diabetes. He has recovered to such an extent at present that he is able to go down to his business. I will state in this connection that I have noticed an appearance of sugar in the urine where there has been trouble of the genital organs both in the male and female. I remember two cases now in which I suggested to a physician here that cancer might be beginning. This patient is in the same condition as she was a year and a half ago; and what is remarkable about the first case is, that the tubercular trouble seemed to be confined to the left testicle; and so far as any reason or cause of the inflammation is concerned I know nothing; the patient is about 45 years of age. In this case I did not notice whether there was sugar in the urine or not; my attention was not called to this subject until after I saw this case, so that I don't know whether there was sugar in his urine or not during the acute symptoms of Bright's disease attending this case.

Stated Meeting, April 15, 1884.

IMPERFECT DEVELOPMENT.

Dr. Schenck.—I have an interesting specimen from a case in which there is an occlusion of the Fallopian tube, especially at the fimbriated extremity. One ovary is perfect but the other is absent; but there is no imperfection of the cornu of the womb on the side where the ovary is absent. I do not know that there is any other specimen like it. It is very rare that we find a case where there is a total absence of the ovary without there being an imperfection of the womb on that side. I do not know of such a case on record. There are three cases recorded in which there was a total absence of the ovaries, and two of these were in fetuses, but the genitalia were imperfectly formed. The other case was that of a girl who died at the age of twenty, previous to menstruation, and there was imperfection in the formation of the genitalia also in her case; but I do not think I have ever seen a case of absence of the ovary upon one side, without there being an imperfect formation of the womb upon that side.

Dr. Bryson.—Did you say that there was no imperfection of the external genitals?

Dr. Schenck.—That I cannot tell, doctor. It was a case about which I know nothing of the history. Dr. Todd may be able to answer the question.

Dr. Todd.—I do not recollect that there was any imperfection.

Dr. Bryson.—Were either of the kidneys absent in that case?

Dr. Todd.—No; that is to say, the students did not mention anything of the kind, and they certainly would have done so, if there had been such absence, as the students are very prompt to observe and speak of anything unusual or that is not in exact accord with "Gray."

Dr. Bryson.—Some years ago some gentleman called attention to the frequency of external deformities being coincident with internal deformities of the kidneys, uterus and bladder. There seems to be an intimate connection between the absence of a kidney and imperfect development of the genital organs; the connection between imperfect external genital organs and the development of the genito-urinary organs is tolerably intimate.

SYPHILITIC ULCERATION OF THROAT.

Dr. Briggs.—I will report a case that presents some unusual feat-

ures. A girl *æt.* 13, was brought to me to be treated for an abscess of the neck. I found on the right side, just above the middle of the collar bone and also coming down under the skin, I will say half an inch below that bone in the front of the chest, what was evidently an abscess. The question was to determine what the character of the abscess was. There was fluctuation present, so that I immediately attributed it to the presence of pus, and after running over a number of things it struck me that it was the result of the gravitation of the pus there. I examined the neck higher up to find out what the source of it was. At last I got the child to open her mouth, and then discovered a ragged, deep post-pharyngeal ulcer; and at the same time it was apparent that from the previous difficulty in the mouth the hanging palate had been destroyed. It was a very young child, and it was not desirable to ask very direct questions, so I drew my conclusions as to the case, knowing that she had been in unfortunate circumstances. I made a sort of valvular opening and let out the pus. I was obliged to open it on the two succeeding days, and the child was meanwhile put on iodide of potassium. She did extremely well on this treatment, and in a very short time the pus ceased to gravitate to this point in the neck, and the ulceration in the pharynx healed very readily and promptly. It certainly is rather an unusual case to have a gravitation of pus from that point, and it was one in which I took a great deal of interest at the time. It is one of the curiosities of medicine.

Dr. Hardaway.—Do you suppose that because of this post-pharyngeal abscess it was syphilitic in character?

Dr. Briggs.—It was tolerably clear from the history of the child and the destruction of the hanging palate and the appearance of the ulcer what the character of the trouble was. It was a deep ulceration going down to the bone nearly.

Dr. Hardaway.—The reason why I ask the question is because I know that post-pharyngeal abscesses are not so uncommon things.

Dr. Briggs.—But this seems not to have been an abscess. I should say it was a deep ulceration; it was quite large, with ragged edges. Of course we have post-pharyngeal abscesses which are not of that origin of which we speak, and sometimes connected, of course, with ulceration of the tonsils, etc. I am tolerably clear that this was not an abscess in the initial.

Dr. Hardaway.—It will be remembered that Niemeyer in speak-

ing of post-pharyngeal abscesses lays great stress on the importance of examining carefully for these abscesses, and says that they are very often overlooked. What was your treatment, doctor?

Dr. Briggs.—Almost exclusively the iodide of potassium.

Dr. Todd.—Did you make no local application?

Dr. Briggs.—No, sir. The fact is I felt certain that by establishing this communication with the canal and by the constitutional treatment I should be successful, and fortunately this treatment was very rapidly successful. The gravitation of the pus ceased in a few days.

Dr. Todd.—I recollect, Mr. Chairman, and that is the reason I asked the doctor about the local treatment, that in one of the syphilitic wards in Vienna, they laid great stress upon the local use of sulphate of copper in syphilitic ulceration, and I have always made it a point to touch such sores frequently with sulphate of copper, the solid stick, like a pencil, with the happiest results. It is intensely painful on the first application, but as a rule this intense pain ceases after the first application. They seemed to get very good results from it in Vienna, and at one time attributed to it almost specific action. I have found those ulcerations, both those due to syphilitic and gummatoid tumors of the soft palate and those deep erosions and ulcerations of the mucous membrane back of the pharynx, where there was the most painful and distressing ulceration, to yield very promptly to the liberal use of the sulphate of copper. It is very easily applied by using the stick and acts favorably at once. I have never known it to fail.

Dr. Briggs.—If the sulphate of copper had been used in this case the improvement was so prompt that it would certainly be cited as a remarkable illustration of the success attending the use of the sulphate of copper.

Dr. Todd.—Sometimes it does not act so rapidly.

Dr. Briggs.—If I had not got rapid improvement I should have been obliged to resort to local treatment; but I was very glad to get out of it as I did.

DILATATION OF INTERNAL OS UNDER CHLOROFORM.

Dr. Schenck.—I have a very interesting case that I wish to report, which I saw last Sunday, and which illustrates the effect of chloroform upon a contracted internal os. It was a case in which there was great enlargement of the womb, intense pain which was periodical in its character, and it strikes me very much as if the

trouble might be malignant in its character. I endeavored last Sunday, during the intra-menstrual period, to dilate the os in order to relieve the condition of fungoid endometritis. I was able when I first examined the patient to get in a very small exploratory wire curette, and hooked out a very small piece which satisfied me as to what was the trouble. She had had some very severe hemorrhages. I endeavored to dilate the os sufficiently to remove with the curette all this fungoid material. I introduced a long sponge tent, left it in over night, and the next morning I endeavored to remove it, and to my astonishment I found it impossible to do so. The secretion from the womb had dilated the portion of the tent that was inside of the small or internal os, and also dilated the external part so that it was held by a perfect band, and I had to take out the inner portion by taking it to pieces; my desire was to incise it, but the patient objected very strongly. I succeeded in getting it out, but I told her I would not continue in the case unless I could get it dilated sufficiently to relieve the condition of the womb. Last Saturday she made the request that I should again try dilating, and I then introduced the very smallest sea tangle tent I could get. I followed that by a very small sponge tent, but it was almost impossible to get it in. It was on Saturday that I introduced this, and on Sunday morning I found that I could not by a considerable effort get in the smallest curette, just as small as I can get made. I hooked out some little pieces, and the patient complained a great deal of the suffering, and would not allow me to go on. She said that I had promised to give her chloroform in case she suffered. Finally I gave her chloroform, when to my utter astonishment, when I made an examination after she had come only partially under the influence of the chloroform, I found that the internal os was dilated to its full extent, so much so that I could get in the largest size of Emmet's curette forceps. I took out a large amount of the fungoid growth and cleaned out the whole internal cavity. It struck me that this was peculiar to find a complete dilatation following the use of the chloroform, where it had resisted dilatation by the sponge tents.

Dr. Todd.—Was there relaxation of any other sphincter?

Dr. Schenck.—I did not notice anything particularly except the womb. I did not examine the sphincter ani; but I never saw the dilatation of the internal os more complete in my life. I have no doubt at all of the definite and distinct character of the action of

chloroform upon the cervix and fundus, which I think is too little regarded in the profession. The functions are entirely opposite. When one dilates the other contracts, as we are aware. I remember several years ago writing an article in which I reported some cases of Emmet's operation and in which I referred to this matter. I was called to see a case near Cheltenham, and found that the woman was having an abortion. The os was considerably dilated, and I sat down there patiently to await events. After being there for some time, the pain somewhat ceasing, I found that the os was so tightly closed that I could not make any examination through the os at all; in the course of half an hour the cervix again dilated, and labor went on to completion. This shows the spasmodic character of the dilatation of the cervix, and it shows the opposite influence, and I think it is very good proof of the fact that we are very often able to free the patient from the risk of lesions during parturition by the free use of chloral in the early period of labor. I am strongly convinced after a very faithful use of chloral that we are too little inclined to use this drug in the first stage of labor for its dilating power, and then afterwards to use chloroform freely to make a full, free dilatation of the cervix.

CHLORAL IN PARTURITION.

Dr. Bryson.—I would like to ask Dr. Schenck if he is in the habit of using chloral and then afterwards chloroform; if he would use chloroform by inhalation after he has used chloral internally.

Dr. Schenck.—Yes, sir; I have done it frequently, particularly where I had to use instruments—afterwards.

Dr. Bryson.—Have you done so without any accident?

Dr. Schenck.—I have had no accident at all. I have never seen an ill effect from the use of chloral in the early part of labor, and then afterwards administering chloroform.

Dr. Todd.—Do you give the chloral to relieve the pain or for its action on the uterus?

Dr. Schenck.—For the double purpose of relieving the pains and producing dilatation of the cervix, and I think that if it were used more freely by the general profession we would have fewer lesions of the cervix than we have.

Dr. Bryson.—I suppose most of the gentlemen present will remember some years ago that Dr. Kennard contended that it was extremely dangerous to give chloroform by inhalation after a dose of

chloral. That was at the time when chloral came into use, soon after it was introduced here.

Dr. Schenck.—I have felt interested in the introduction of chloral because I think it was in our lying-in department that it was first used. I do not know whether the gentlemen will remember, but a gentleman who is now a member of this society was then an assistant with me. It will be remembered that Dr. Bribach wrote a very good paper on the subject after we had had considerable experience with its use there (Vid *COURIER* May '81). I think I may be mistaken, but I think it was first used there in the early stages of labor.

Dr. Todd.—Is that the special action of chloral?

Dr. Schenck.—Chloral and chloroform act both the same way in dilating, and I give them for the action which each produces.

Dr. Todd.—Does not this drug have any effect upon the fetus in pregnant women?

Dr. Schenck.—I never fear that effect on the fetus; if it has any I have never seen it.

Dr. Todd.—Does the baby cry as vigorously after birth?

Dr. Schenck.—Yes, sir; there is not a particle of difference.

Dr. Baumgarten.—From my experience I can affirm what Dr. Schenck has stated. In labor I use both together; I often use chloral in the first stage and chloroform by inhalation afterwards without seeing any hemorrhage and without any effect on the child.

Dr. Briggs.—Do you give it by the mouth or per rectum?

Dr. Baumgarten.—I give the chloral per rectum.

ANTIMONY IN ECZEMA.

Dr. Hardaway.—I would like to mention the result of some new remedies in skin diseases which may interest all. Some time ago I remember when Dr. Malcolm Morris' new book came out, among other things that were recommended in acute eczema was tartar emetic; this was recommended in acute cases, in very small doses, of course. This had been recommended by Cheadle, and Morris indorsed the remedy. Since that time Morris has called attention to the value of the wine of antimony. He has used it in a number of cases of different forms of skin disease, frequently in eczema. I have used it largely in several dozens of cases and the results have been very satisfactory; indeed, I was very much surprised. Morris begins with four drops and increases to seven and a half of the wine of antimony. I have tried it in a number of cases, not selected

cases, and I must say that the result has been most satisfactory in controlling the itching, which is always the principal factor in keeping up the disease. I have given it in acute and chronic cases of eczema and I have given it in pruritus and in nearly every instance the result was to stop the itching. My experience is not large enough to say in what cases it is indicated and in what it is contra-indicated; but so far as I have given it, it has been very satisfactory. For example, I found that in acute, vesicular eczema it has done well, alleviating the itching; and I found in chronic papular eczema, where as you know the itching is most intense, that it has relieved the itching very markedly and sometimes absolutely abolished it. I have used it in some cases of pruritus with good results. If the pruritus depended upon some mechanical difficulty, of course it would be only a palliative measure, but it is satisfactory to have some such remedy. What its action on the skin is I do not know, but it certainly does less harm than arsenic. The use of arsenic in acute skin diseases is very general and very pernicious, and arsenic does not control the itching. A desideratum has always been with dermatologists to get something to take the place of salves, lotions etc., and recently in Germany, Pick, of Prague, has formed a gelatine cake; it is gelatine and water made into a cake and combined with a certain proportion of chrysophanic acid, or other drugs. Still later Professor Kaposi of Vienna, has substituted gutta-percha, and particularly with the use of chrysophanic acid. It is a rather curious fact that I had a patient suffering from psoriasis who was by trade a manufacturer of printer's rollers; he had an inveterate psoriasis. Now in the manufacture of printer's rollers, gelatine is used, and this gentleman experimented a little himself, and got to use it, as I know, because I saw it applied to his person before Professor Pick's article appeared. The gutta-percha solution is much better than gelatine. The gelatine process was modified afterwards by Unna of Hamburg, by adding a certain amount of glycerine; but the difficulty was found to be that it was smeary. The advantage in using gutta-percha, is that it dries immediately, and by using five or ten per cent. of chrysophanic acid, and painting it on with a camels' hair brush, we have much more satisfactory results. It enables us to brush it in, which is an advantage because it remains fluid a few minutes and enables us to brush it in before it is solid. I

have used tar, but tar being oily is objectionable. With gutta-percha, you can paint the patches and in a few minutes it is dry. This solution sets closely and only peels off gradually. If you use it too strong or too frequently, you will get a characteristic dermatitis, so one must be very careful as to the strength. Five per cent or a little more is sufficient. Then finally in this same line of investigation, Dr. Unna of Hamburg introduced what he calls — well it is difficult to translate it — however he takes muslin with very wide meshes and diachylon ointment; he then scrapes the side that goes outside and lets the ointment remain on the inner side; this is cut into pieces, and in some cases it acts admirably. In erythematous eczema of the forehead, where we want to make an application, it can be kept on very admirably, where the use of ointment would be disagreeable; we can take these pieces cut just to fit, and thus we have a constant application; it is also advantageous in case of eczema of the fingers and hands or other places where we want to make any application. Another remedy that fulfills the same indication has been suggested by Lassar. I may say here, that the Germans are becoming very practical therapeutists in this department of medicine. Lassar makes a mixture of a half a dram of salicylic acid, half an ounce of oxide of zinc and starch, and two ounces of vaseline. When put on the skin where there is no great heat or moisture, it dries, and the vaseline disappears, and you have a coating of salicylic acid and starch left on the surface which is very difficult to rub off, and in some cases it is very advantageous to use this remedy. These are a few things that have recently been mentioned; the wine of antimony is something quite useful, and as far as my experience goes is quite satisfactory.

Dr. Baumgarten.— The paste Dr. Hardaway speaks of, I have had in my house for the last two years, and it has been very useful. It has been used for all sorts of irritations of the skin, for eczematous patches, for chapped hands, etc.

Dr. Hardaway.— I have used it in the clinic and in private practice. It should be made absolutely impalpable, and is very difficult to make.

Dr. Baumgarten.— Dr. Hardaway says he does not know how to account for the action of the tartar emetic upon the skin in relieving pruritus. I can imagine this to be the effect. I will

say that I have used it. You all know that nervous women, especially those who have slight affections of the uterine organs, dysmenorrhea etc., frequently suffer attacks of eczematous vesicular eruptions, that appear suddenly and pass off again. These little outbreaks of itching vesicles with some women set in about the menstrual period. This usually occurs in women in whom any irritation will produce a very quick reaction, with general irritability of the whole system and great nervousness. In these reflex action is increased. Now we all know that in the days before the introduction of anesthetics, when surgeons wanted to reduce the reflex activity of patients to be operated upon, they would give a dose of tartar emetic which produced nausea and relieved the irritability, and the patient then would not react against irritation, even against severe and painful irritations. This is possibly the explanation of the action of the tartar emetic in the cases Dr. Hardaway has referred to.

Dr. Hardaway.—I presume so, although the doses given were very small.

Dr. Baumgarten.— Yes, tartar emetic does good in that way. There is one instance in which tartar emetic certainly does serve that purpose. Many persons are made irritable by opium, especially by small doses. Some patients become extremely irritable from the opium, and have many unpleasant symptoms. When in these cases opium is combined with tartar emetic in very small doses, the unpleasant effect is removed. I have known one gentleman, a very nervous man who could not bear opium or morphine or any of the opium alkaloids, but very small doses of opium and tartar emetic combined he bore perfectly well; as little as two minims of the tincture of opium and one minim of the wine of antimony every half hour, after about six doses would put the patient quietly to sleep, whereas he had three or four sleepless nights in succession before that.

Dr. Hardaway.— That is the combination advised by Graves in the delirium of fever.

Dr. Baumgarten.— I got hold of it from some English writer who proposed giving it in certain inflammations. I do not think it came directly from Graves.

Dr. Briggs.— I use it very much, and I really think that Graves was the man who started it, and that this man that Dr. Baumgarten speaks of, got it from Graves. It was quite a dis-

covery when Graves brought it forward, and it was mentioned as quite an efficient remedy in delirium tremens.

URIC ACID AS A PARASITICIDE.

Dr. Schenck.— I went last, week, by the invitation of the chief gardener of Shaw's Garden, Mr. Guerney, to look through the collection of medicinal plants. While I was talking to him, I noticed a man throwing some liquid over some very delicate plants there, and asked him what he was doing. He said they were killing parasites. I asked what he used. He laughed heartily, and stated that he supposed that he used what nobody else used; and then he told me the way he commenced its use. Near one of the hot houses, there was an old cistern, and the pipe running down to this cistern had an open mouth. This was a favorite place for the men to urinate, and the urine would run down in the cistern. He noticed that in the hot houses where they used water from this cistern, the flowers were almost entirely free from parasites. Profiting by that, he bought some uric acid, and he is now using uric acid to kill the parasites upon delicate plants. He says it does not injure the leaf at all.

THE MEDICAL ASSOCIATION OF THE MISSISSIPPI VALLEY will hold its next meeting at Springfield, Ill., September 23, 24, 25 and 26. This is the same society which has heretofore been known as the *Tri-State Medical Society*, having been organized by leading physicians of Illinois, Indiana and Kentucky. After a few meetings the boundaries were enlarged so as to admit members from St. Louis and Cincinnati, and at the last meeting it was decided again to enlarge the scope of the Association and change the name accordingly. The work done by this society has been exceedingly creditable to it and the discussions have been very profitable to those in attendance. We cannot too strongly urge upon such of our readers as can do so, the importance of attending and taking an active interest in this most valuable organization. We hope that large numbers of them will be present at Springfield, where arrangements are already made for an exceedingly interesting meeting.

COMMUNICATIONS.

THE MEDICAL MEDUSA.

SEWARD, Neb.

Editor Courier:—I read in the July issue of the COURIER that two men dared to report the failure, in their hands, of the McDade plan of treating syphilis, a complete one.

Lauded, as it was, by all sorts of testimonials, it came to me with much promise. I armed myself with it and attacked a tertiary form of syphilis with commendable intrepidity. Two pints had been taken without effect, the lesions remaining the same. The patient, disappointed in the prognosis, lost faith in my ability and soon relieved me from further concern in the case. I ventured again and again, but always had to retreat and sometimes not in the best of order. Separate and apart from this experience with this much praised "*formula*" I desire to admit a similar experience with a multitude of "ines," "acids," "foods," etc.

Now I believe that not one, nor ten, but ten thousand other physicians could testify to the inefficacy of many of these same combinations. For that reason it seems high time that the medical profession rise *en masse*, hurl its full weight against these "candied" nostrums which approach so near the "patent medicine" domain that if they do not overlap its boundary they frequently eclipse it in worthlessness.

Is not our *Materia Medica* sufficient, and is it not greater to be rational than credulous? Not one of us will admit that the "Indian doctors" and other specially inspired "healers" are in possession of means of cure unknown to medicine and surgery. Then why will many of us accept of things and combinations, *and use them, too*, utterly foreign to our pharmacopeia? We profess to stand out, boldly and without flinching, as the followers, if not the ex-

ponents of rational medicine; yet is it not a fact, that every day we see our materia medica and therapeutics prostituted and ourselves inveigled more and more into empiricism?

Individually and collectively we have striven to educate the masses against the evils of the hydra-headed nostrum; we have preached to them that "cough killers," "pain annihilators," "diarrhea cures," etc., *ad infinitum*, do not nor can they cure all kinds of coughs, pains and diarrheas.

Yet, in all candor, have not many of us tried to do that very thing ourselves, the only difference being that in our case the "elixir" has been made by some recognized manufacturer of pharmaceuticals, put on the wholesale markets from which baits have been thrown down to us in the form of *free* samples? "Age thou art shamed!" At a time when such lights as this century of American medicine affords are burning in the zenith of their glory, nostrums of whatever form or hue ought not to flourish as they do. It is a damnable libel on inductive treatment; it is a vicious ugly *phagedena* on the otherwise fair body of the profession.

I. D. LEONHARDT.

PREMONITION OF DEATH.

AUBURN, N. Y., August 6, 1884.

Dear Doctor Nelson:—I am in receipt of your letter of 30th ult., requesting me to furnish you a detailed account of an incident that I once described to you as occurring in my early medical life. I accede to your request, for although more than fifty years lie between now and that event, the marvellous scene is as vividly pictured in my memory as if it were an event of yesterday. To men of science, of profound intellect and deep thought, I have related the occurrence and requested a solution, but in no single instance have I been favored with an attempt to solve the problem. There it remains—unparalleled in its mystery, the recondite cause unexplained and unapproached.

I have often thought of committing it to manuscript, but as often failed—from the obvious fact that the *little attendant circumstances* which gave supreme interest could not be mentally photographed or pictured with pen and ink by the most dexterous adept.

I could state that a man in vigorous health "foretold his own

death, and without any apparent cause fulfilled his prophesy," but that alone would fall unheeded, unremembered and devoid of lasting interest unless the little *Links* in the wondrous *Chain* could be made to appear; and these could not be reproduced.

The study of mental phenomena is of peculiar interest. Willingly or unwillingly, we must admit that whether by dream or by simple impression, there is such a thing as presentiment, being a reliable witness that "There are more things in heaven and earth than are dreamt of in" our "philosophy."

Herewith I submit a statement of the case:

Mr. S. (the subject of this narrative) was about fifty years old, of good health and average mental ability. In his earlier years he had been a very devoted Christian, but latterly had been remiss in Christian duty, though not chargeable with immorality. His habits were frugal in every particular, with the exception that *occasionally* it was thought he had taken too freely of spirituous liquors.

Early one morning I was sent for (as his family physician) to see him. I found him seated on a chair perfectly composed and apparently at ease. To my inquiry concerning his health, he replied:

"I am very well."

"Why then did you send for me?"

"I did not send for you, and did not want you to come, but my wife would send for you."

At this moment his wife beckoned me into another room, and related, nearly verbatim, the following:

"Last night my husband retired to bed before I did, and when I afterward went in with a light he rose up and inquired who were those three men sitting on the chairs. I told him there were none there. He laid down for a few minutes, then arose and talked. I asked him who he had been talking with. He said he had been talking with those three men that were sitting on the foot of the bed. I asked him who they were. He replied, 'I don't know. I never saw them before, but I think the middle one is Jesus Christ; and he told me that on to-morrow at a little past twelve o'clock I should be taken with shaking and should die before the sun set. This morning my husband rose as well as usual, ate a hearty breakfast—yoked his oxen for a load of wood. When ready to start, he said, 'What is the use of this? I am going to die before night and I won't go for wood.' He unyoked his oxen and went into the house."

Then it was that Mrs. S. sent for me. I then went to Mr. S. and asked if he would take some medicine. He said:

"I will take all you have in your saddle-bags; you cannot kill me, nor can you cure me. I shall die as I said I should."

"Well, Mr. S. if you are to die this day and appear before your Maker, what are your prospects for the future?"

He replied with great solemnity and emphasis:

"If the doctrine of election be true, I think I shall be saved, for *I do believe* I was a Christian."

Lest I might overlook any important feature in the case, I sent for another physician for counsel, who pronounced Mr. S. free from disease and retired. To me there was sufficient interest in the *beginning* to secure my undivided attention to the *end*. The prophecy had stated that the shaking was to commence after twelve o'clock, which permitted all the forenoon to frame a theory and adopt a treatment. My conclusion, I trust, will receive the full concurrence of the profession. It was, that if there was anything *supernatural*, I could only be a spectator; but if it were the result of morbid *imagination*, the appropriate treatment would be to destroy the imagination till the time fixed for his exit had passed. At a little past twelve his prophecy began its fulfilment. He commenced to shake, which I promptly met with a table-spoonful of laudanum. (This was fifty years ago and before the day of anesthesia.) Waiting with intense anxiety to see the result of this *heroic* dose, I found it produced *no effect, not the least*, but the shaking increased. I gave another table-spoonful without any effect; the shaking increased. I gave at intervals another and another and another and another till I exhausted a four ounce vial. After this I only looked on and waited for the issue. When the shaking became so terrific as to prevent him from retaining his seat on the chair, he was laid on the bed, on his back, in which position it required four men, one for each arm and one lying across each leg to keep him on the bed.

This condition so continued till near sun down, when the shaking and breathing, simultaneously terminated. His strange prophecy had been literally fulfilled. Was it imagination?

S. WILLARD.

[May not the man have been addicted to the use of opium? Else how could such quantities of laudanum have been without effect upon him?—ED.]

DR. A. P. LANKFORD.—The Saline County Medical Society sends us the following series of resolutions adopted at their last meeting:

WHEREAS, It has pleased an allwise Providence to remove from our midst Dr. A. P. Lankford, the embodiment of all the virtues of a true gentleman, while in the vigor and prime of manhood, and whose life was full of usefulness, honor and promise, and who was an ornament to his chosen and coveted profession.

Therefore, be it resolved by this association, that we extend our heartfelt sympathy and condolence to the bereaved parents and relatives of our distinguished brother in the profession.

Resolved, That in the death of Dr. A. P. Lankford the profession in the west has sustained an irreparable loss, and the science of surgery one of its ablest advocates, he having filled the chair of surgery in the Kansas City Medical College, and subsequently the same position in the Missouri Medical College; in each position he evinced distinguished skill and ability.

Resolved, That these resolutions be recorded in the minutes of this association, and that a copy of the same be furnished for publication in the Marshall papers and the St. Louis COURIER OF MEDICINE, and a copy be sent to the parents of our deceased brother.

J. R. HALL,	}	Committee.
F. C. COLLIER,		
J. B. DAVIS,		

COCA.—Dr. Squibb states in *Ephemeris* that the supply of coca in the drug market is so utterly unreliable and valueless that he has discontinued the manufacture of the fluid extract of that drug. He proposes as a substitute a fluid extract of tea under the name of fluid extract of camellia. He asserts that nineteen-twentieths of the coca seen in the eastern drug markets during the last two years is almost inert and valueless.

THE WESTERN LANCET AND THE PACIFIC MEDICAL AND SURGICAL JOURNAL have consolidated, and the editors of the two journals act together in conducting the new journal. This arrangement will be of advantage to both in lightening the burden and improving the quality of the work done.

ST. LOUIS COURIER OF MEDICINE.

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No. 4.

ORIGINAL ARTICLES.

A CASE OF MULTIPLE XANTHOMA, EXHIBITING THE PLANE, TUBERCULAR AND TUBEROSE VARIETIES OF THE DISEASE; WITH REMARKS.

BY W. A. HARDAWAY, M. D., *Prof. Dermatology in the Mo. Med. Coll.;*
Consulting Dermatologist to the City and Female Hospitals of
St. Louis.

[*Read Before the Am. Dermatological Association. West Point. New York,*
August 27, 1884.]

M. M., æt. 44, born in Germany, occupation cook, was sent to me for examination by Drs. Dorsett and Epstein, of the St. Louis Dispensary.

It seems that in 1876 he was a patient in the City Hospital, and for the notes of his case at that time, and for his early history, and also for opportunities of seeing the patient after his readmission to the hospital, I am indebted to Dr. Dean, the superintendent and physician in charge. His father and mother were healthy people and lived to an advanced age. He himself had been strong and well, except having had ague, up to four years before his admission to the hospital. From his boyhood he had suffered from hyperidrosis of the feet to an excessive de-

gree. He also perspired freely from the general surface. While he was working before an intense fire every day from 3 to 11 o'clock, he began to stop sweating, and in its stead he experienced severe burning and itching, and two years after it was noticed that he was turning yellow. During this time his sleep and appetite were poor. His food frequently regurgitated. He would sit by an open window to ease the burning and itching of his skin.

When Dr. Dean saw the patient, his right side was almost of a bronze color, but the left side was yellow; heart and lungs sound; liver enlarged. He had been treated in the hospital since December 18, 1876 for chronic hepatitis, and left June 12, 1876. He remained out of the hospital for a number of years. Happening to apply to the City Dispensary for relief on May 23, 1884, he was referred to me, and shortly afterwards was again admitted to the City Hospital. At this time the diagnosis of xanthoma was made, and I had the pleasure of showing the case to the members of the St. Louis Medico-Chirurgical Society. The following notes were then taken:

According to his best recollection it is now four years ago that he first noticed xanthomatous lesions in the gluteal region. The various growths appeared gradually, but in what order he does not know. From the very beginning of the discoloration of his skin, twelve years since, up to to-day, he has suffered from an agonizing pruritus of the general surface, and it is for this that he has sought relief at the hands of physicians. He says that he has never experienced headache in his life.

Present Condition.—Patient is about 5 feet 7 inches in height, and weighs 138 pounds. His appetite is ravenous, but at the same time he says he feels quite weak, and occasionally has attacks of dizziness. Pulse is feeble. Has emphysema of lungs, with consequent asthmatic paroxysms. Temperature is normal. He passes about 65 ounces of urine daily, which is of a dark amber color, of acid reaction, specific gravity 1016, and shows a trace of sugar. No albumen or casts. Stools, clay color. The liver is enlarged laterally, much thickened and apparently nodular; has well defined edge. The dullness begins one-half inch below nipple, and extends to three inches below the level of the ribs, and two inches to left of the epigastrium.

A general inspection of the patient reveals the following: He is evidently feeble, and looks quite decrepit, and has a stooping gait and shuffling walk. The color of his skin at once strikes the attention. It is of a decided bronze hue, almost black, and darker in some situations than in others. The conjunctivæ are also involved in the general discoloration, but are much lighter than the skin. Indeed, the man looks as if he were the subject of Addison's disease rather than jaundice. The whole integument shows the characteristic markings of an intense and uncontrollable pruritus—it is torn, thickened and scarred, and the hairs on the scalp and elsewhere on the body have been almost scratched away.

Face and Head.—On the upper lids are to be noted the characteristic patches of xanthoma planum. They are of a much lighter color than the surrounding skin, and are all the more conspicuous on that account. They extend, on each upper lid, from one canthus to the other, and, perhaps as the result of coalescence, occupy nearly the whole width of the lid. They are elevated above the level of the skin, but possess no decidedly marked tuberculated edges. On the upper lids one may see at regular intervals closely packed black dots, the apertures of gland ducts. On the lower lids, and extending somewhat down on the cheeks, the patches are smooth, irregular, and on a level with the skin. On the upper lip are four tubercles from pinhead to pea size. Scattered over chin are a number of small tubercles. On the left ear are four tubercles, and on the right, five, pea-sized and apparently involving the whole thickness of the skin.

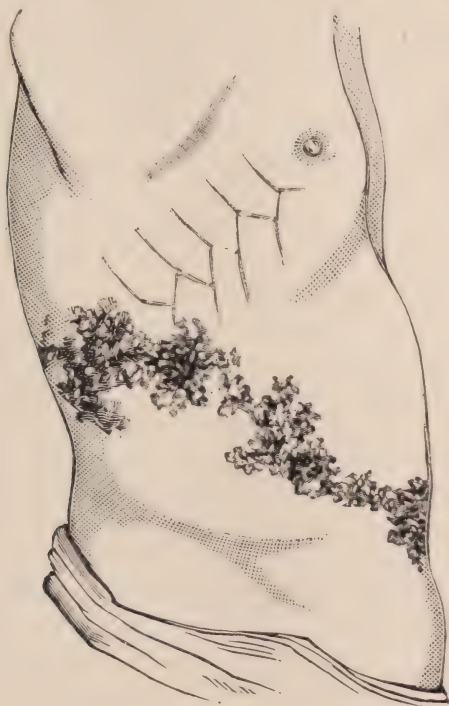
Upper Extremities.—Over the right olecranon process is a double tumor, each half the size of a pigeon's egg, and over the region of the elbow generally there are about twenty-five tubercles varying from a pinhead to a pea in size. Over the left olecranon are two aggregated masses of the bigness of a hazel-nut, and in the same region are eight or ten smaller tubercles. On the outer border of the right wrist is a hazel-nut sized growth, and on the back of the wrist is also a small tumor. On the right index finger, at the metacarpo-phalangeal junction, dorsal surface, is a tumor the size of a hazel-nut. Over the first joint of

index and second fingers are two tumors on each of the size just mentioned. On the last phalangeal joints of first, second, third and fourth fingers are growths somewhat smaller than a hickory nut.

On inspecting the palmar surface of the right hand, we find an infiltrated yellow line exactly occupying the furrow which divides the ball of the thumb from the palm. In the crease over the first phalanx of the thumb is a congeries of flat yellow bands. The whole ball of the thumb is a mass of closely packed tubercles. The index finger, palmar surface, of this hand, has a broad band running across the second phalanx. On the palmar surface of second finger is a solid mass of tubercles, some more prominent than others, and here and there of a yellower color, extending from tip of finger to metacarpo-phalangeal junction. This same condition is also to be observed on the palmar surfaces of third and fourth fingers. Upon scrutiny of the dorsal surface of the left hand the xanthomatous growths are found to be disposed as follows: On the inner border of the wrist are three tumors, two large and one somewhat smaller. The small one is the size of a pea, and the others, as on the other hand, are as large as hazel-nuts. On the second joint of the first finger is a filbert-sized growth. On the second finger is a small tubercle over the metacarpo-phalangeal joint, and on the second phalangeal joint is a hazel-nut sized tumor. The joint is decidedly enlarged at the metacarpo-phalangeal articulation of the second finger. A tubercle is to be distinctly felt on the tendon of the extensor indicis. On the inner border of the second finger near the second phalangeal joint is a large mass of tumors of the size of a half of a hickory nut. Over the last joint of this finger are two growths the size of a pea and one as big as a hazel-nut. On the third finger, second joint, a hazel-nut sized patch and over the last joint are two—one the size of a hazel-nut and one the size of a pea. Over the little finger, last joint, is one growth, the size of a hazel-nut. Over the left elbow are two large tumors, the size of a pigeon's egg, and a number of smaller ones in the vicinity.

Trunk. Commencing at the spine, and extending between the tenth and twelfth ribs, and obliquely upwards to the ninth

rib, then crossing the ninth and tenth ribs on a line dropped from the axilla to the crest of the ilium, and then obliquely downward to the umbilicus, and strictly limited by the median line, are observable clusters of innumerable yellow xanthomatous tubercles, having the exact arrangement of herpes zoster. These clusters of tubercles form a band on the right side of the



body two inches in width, and exactly limited by the spine in the rear and the median line in front. In three or four places a dozen or more tubercles have coalesced, making small quarter dollar sized plaques.

The other hundreds of tubercles, although touching each other on all sides, still retain their individuality. They are slightly elevated above the line of the skin, and in many instances are clearly umbilicated. From their corymbose grouping and other features it is manifest that they correspond to the

distribution of the cutaneous nerves of the region involved. These tubercles date from an early period of his disease. He gives an indefinite account of neuralgic pain in these parts before the growths appeared. (See illustration).

Over the left gluteal region near the cleft, is a group of nineteen tumors, ranging from a split-pea to a hickory nut in size, and two inches below, just above the gluteal fold are three large hickory nut sized tumors. In the cleft between the nates is a band-shaped growth made up of distinct tubercles. Just above gluteal fold on right side is a cluster of twenty tumors as big as hickory nuts, and scattered over buttocks are eight the size of a split pea. On the back of the thigh of each leg are three small, pea-sized lesions. On anterior surface of the thighs are a few—some twelve on each—of the same dimensions, scattered up and down the parts.

Over the right knee are four tumors, ranging from split pea to hazel-nut, and over the left knee is one the size of a hazel-nut. On the tibia of each leg, just below the attachment of the lig. patellæ, is to be seen and felt a large node of the size of half of a hen's egg. Over the left heel, internal surface, is a xanthomatous lesion the size of a half hen's egg, and two the size of hazel-nuts. In and on the tendo Achillis is a large growth the size of a pigeon's egg, and two the size of peas.

On the external surface of the heel is one flat infiltration the size of a half dollar, and two the size of pigeons' eggs. Under the os calcis are eleven flat, yellow infiltrations from the size of a silver three cent piece to that of a silver dime. On the internal border of foot is an aggregated patch as big as a quarter dollar. On external border of foot (left) about the middle, is a reddish-yellowish tumor half the size of a hen's egg. Over the metatarso-phalangeal joint is an infiltration the size of a half dollar. Over inner side of great toe is a yellowish patch the size of a half dollar. Over crest of tibia of the right leg is a number of tumors the size of half of a hen's egg. These growths do not rise prominently above the level of the skin, but are quite appreciable to the touch. On the inner side of calf one lesion, the size of a hazel nut. On tendo-Achillis of this leg also are several tumors, one the size of

a small hen's egg. On external and internal surface of heel are two aggregations, each the size of a half dollar, made up of small tubercles. There is a large tumor on the outer border of this foot about the size of, and in the same situation as that on the left foot. On the second toe are four small tubercles and also on the dorsum of the foot are a few scattered tubercles. The internal and external malleoli are enlarged to the size of half a hen's egg, and stand out prominently. On the glans penis is a single intensely yellow tubercle the size of a pea, and on the scrotum are a dozen similarly sized very yellow lesions. There are no growths on the scalp. On the chin a few of the tubercles are pierced by hairs.

At my request Dr. J. C. Mulhall kindly made an examination of the patient's mouth and larynx, and sent me the following report:

May 24, 1884.

DEAR DOCTOR—The man Meyer presented the following appearances:

At the lower sulcus, between jaw and cheek, a continuous irregular yellow staining (the upper sulcus uninvolved). A like appearance involving the soft palate, stopping definitely at its junction with the hard portion. The vocal cords are of a pale yellow hue. In the trachea, anteriorly, from the lower border of the cricoid to the second tracheal ring are several pinhead infiltrations, and just at the lower border of the cricoid anteriorly, two large flat infiltrations with irregular borders, each slightly larger than a kidney bean, and symmetrical in every particular.

Their situation precludes any possibility of being a factor in the dyspnea of which the man complains.

Yours truly,

J. C. MULHALL.

Color of Lesions.—The color of the plaques on the eyelids presents the fawn or buff tint usual in this situation. The tubercular and tuberosc growths vary in tint. Most of the small isolated tubercles are yellow; in some places, where they have massed together the masses are bronzed like the skin. Many of

the tumors are a darkish red, but when pressed upon become yellow, not as a whole, however, but in a mottled way.

Symptoms. The general symptoms are mostly referable to the patient's emphysema, and to a marked distention of the abdomen. There is also tenderness and occasional sharp pains over the hepatic region. I have already mentioned his pruritus. The lesions themselves give him no inconvenience, except in a mechanical way.

When pressed upon firmly no particular sensation is experienced, but if he should knock the large tumors on his hands against some article, there is aroused some smarting and burning. There certainly is no spontaneous pain, nor pain on direct, firm pressure. The various lesions, however, participate in the general pruritus.

I may state in this place that a few of the tumors over the knuckles are quite gristly, but in other situations, even the large masses are soft. I could not determine that the plane variety ever began as tubercles, or that extension took place by the deposit and subsequent fusion of papules. On the lids, the patches seemed to grow by peripheral extension. In the centres of many of the tubercles on the side were to be observed minute black dots, like plugged orifices of glands.

REMARKS.—In making a general review of the case, the following points may be noted:

1. It is established that the bronzed hue of the skin preceded the xanthoma by a number of years.

2. The eruption is perfectly symmetrical, with the exception of the curiously arranged lesions on the side of the trunk.

3. The involvement of the mucous membranes, and the undoubted implication of the internal organs.

4. The peculiar configuration and location of the tubercles on the side, showing the probable influence of the nervous system in the evolution of xanthomatous lesions.

5. The presence of xanthomatous growths on tendons and in the areolar tissue, but more particularly the probable implication of bone structure in the same process.¹

¹ T. C. Fox (*Lancet* Nov. 9, 1879) reports a case which he in another

6. The evidence, though slight, of sugar in the urine.¹

7. The patient states that some of the growths have disappeared; but of this fact I have no personal knowledge—it is clear, however, that new lesions are still constantly developing.

From a careful consideration of this and other cases that have come under my observation, and a thorough study of the literature of the subject, I am inclined to suggest that xanthoma is a diathetic affection, and that its connection with the liver, and the frequent jaundice, occurs only in a secondary way. In other words, it seems to me plausible, that when jaundice precedes the xanthoma it is because xanthomatous lesions have been primarily deposited in the liver; and unless this occur, there may just as well be a xanthoma without jaundice—as has, in fact, been often seen; but that the liver is peculiarly prone to these growths, and that it is for this reason we see so many cases of xanthoma which have been preceded by, or associated with, jaundice. A study of the cases of hereditary xanthoma² and of

place (Epitome of Skin Diseases, Phila., 1883) speaks of as presenting “remarkable bone changes of a gouty or rheumatic character.” On examination of the original report (*loc. cit.*) we find that the patient was a markedly rheumatic and gouty subject, and that the bone changes in question consisted of pain and swelling back of the right os calcis, and swellings about the phalangeal and metacarpo-phalangeal joint. Certainly this state cannot be considered as strictly analogous to the nodes and enlargements observed in my case. Then again, my patient gave no rheumatic or gouty history.

1 Hutchinson says that the two cases of vitiligo tuberosa which have been recorded in association with diabetes, in which the eruption came out suddenly, and also showed a tendency to cure, were perhaps examples of a different malady. (Hebra and Kaposi Syd. Soc. edit, p. 364) Mr. M. Morris has described an eruption which he says seems allied to xanthoma, which was observed in connection with diabetes. The differential diagnosis seemed to be founded on the absence of jaundice, the solidity of the lesions, the freedom of the lids, the presence of the spots in the neighborhood of hair follicles, and the absence of complete yellow coloration in the lesions. In this present case, tubercles were pierced by hairs, some of the nodules on the fingers were hard, and some lesions were brown.

2 For cases of hereditary xanthoma see reports by Barlen, *Brit. Med. Jour.*, May 24, 1884, p. 998; and Eichoff, *Deutsche Med. Wochenschr.*, 1884, No. 4. Church, *St. Bartholomew's Hosp. Rep.*, 1874, vol. x., quoted by Legg.

the numerous cases in which jaundice was absent only lends strength to this view. It is also probable that in persons having the xanthomatous diathesis, certain conditions of irritation, or unusual motion and the like, may provoke a local deposit *in situ*; for instance, in the lids, over joints, etc. Thus my patient may have had his peculiar zosteriform deposits evoked by an abortive zona.

For much assistance in taking the notes of the preceding case, I am indebted to my friend, Dr. E. W. Hodsdon.

“MOUNTAIN FEVER.”

BY JESSE E. THOMPSON, M. D., LAKE VALLEY, N. M.

[Read Before the Southern New Mexico Medical Association.]

IN the mountain regions of the West there prevails a fever, or fevers, to which the laity has attached the name of “Mountain Fever.” Their ignorance of the nature of disease has fitted this cognomen to a variety of diseases afflicting the population of the Rocky Mountains, prominent among which are pneumonia, enteric and malarial fevers.

The disposition to coin new names, as well as new diseases, is not confined to the non-professional alone, but medical men practicing both in military and civil life among the Rockies evince the same tendency, evidences of which abound in western medical literature; hence the terms “mountain fever, typho-malarial fever,” both of which are known in the military department as “Camp Fever.” The “typho-malarial fever” of Woodward has been accorded the dignity of recognition in our standard textbooks on the practice of medicine. There are, however, many independent thinkers in the profession, who, very rightfully question the expediency of the introduction of new terms applied to well known diseases that express no pathological condition new or unknown. There can be no relevancy between the terms “mountain” and “typho” as prefixed to the prevailing fevers of

this region and those prevailing elsewhere. "Mountain" carries with it the idea of elevation, ruggedness, wildness, grandeur, which would be ridiculous, not to say absolutely silly, when associated with any fevers known to the human race. "Typho"—*typhoides*, is from the radical typhus, which means *stupor*, and when applied to disease inspires one with the idea that the chief feature is profound stupor, in other words typho-malarial fever would mean literally *stupid malarial fever*, which has no special pathological significance as applied to malarial fevers, besides, having no physiological and anatomical meaning whatever. It has a phenomenal bearing with regard to many diseases and, we could say *typho-meningitis*, *typho-scarlatina*, and so on almost *ad infinitum*, with as much propriety as we can apply the prefix to enteric and malarial fevers. Therefore "mountain fever" is simply enteric and malarial fever prevailing in the Rocky Mountains, and nothing more. As to "typho-malarial fever," we answer, it is simply adynamic malarial fever, the common continued fever of the old writers. The same may be said of the so-called "camp fever" which prevailed throughout the Union and Confederate armies in the South during the late war. Malarial fever is not and cannot in any pathological or anatomical sense be of kin to enteric fever. Hybridity may exist in animal and vegetable life, but it is sheer nonsense to apply it to any of the essential fevers. Climatic and other influences may modify types, but never change their identity. Thus it is that people subjected to depressing agencies are liable to succumb more readily to any disease than those more favorably situated, which is especially true of the toxic effects of malaria.

Enteric fever prevails as well in malarial as in non-malarial districts, and when persons long subjected to its toxic influence are attacked with any idiopathic or traumatic disease they are very liable to complications commensurate with the malarial impress upon their constitutions; and to charge enteric fever, for example, with loss of identity by hybridity would be an anomaly in medical science. The two diseases, arising from totally dissimilar causation, have no pathological, physiological, or anatomical kinship. If we have malarial fever at the onset, it so remains till returning health or death ends the scene—never malarial at

one end, and enteric at the other; dual in causation, nature and habit, they twain cannot become one.

Every specific disease must have a specific causation of its own. Hence, as malarial and enteric fevers are distinctly separate and specific diseases, their causation must be distinctly different, acting on the system through different media affecting different organs and producing different phenomena.

Malaria produces periodicity; this feature is its specialty, and is without a pathological anatomy.

Dr. Smart, of the U. S. Army, says of "mountain fever:" "It is simply a malarial remittent which if uncontrolled in its earlier stages assumes the adynamic type which is present in enteric fever."

Dr. Woodward, U. S. Army, divides mountain and typho-malarial fevers, which he considers identical, into two classes, both comprehended under the title typho-malarial:

1. Those in which the malarial element predominates over the typhoid.
2. Those in which the typhoid element is most prominent.

There is a striking similarity between "mountain fever" and the "camp fever" of the civil war to which Dr. Woodward gave the name "typho-malarial fever."

Dr. Smart thus classifies the camp fevers occurring among the U. S. troops stationed in the Rocky Mountains:

1. Malarial fever, the result of cutaneous and pulmonary absorption of malarial exhalations.
2. Aqua malarial fever; the adynamic remittents caused by the ingestion of malarial waters.
3. Typhoid fever, originating in the causes of abdominal typhus, and occurring either uncomplicated or complicated in its symptoms and progress by exposure of the subject to malarial exhalations or deterioration of his constitution by the use of malarial waters."

These observations accord fully with my own, having treated enteric, remittent and intermittent fevers in the Black Range, Sierra Co., N. M., which did not differ from the same diseases I have treated both in civil and military practice in the valley of the Mississippi during the past 25 years.

A synopsis of the following cases, occurring in the town of Kingston, situated at the foot of the Black Range, on Percha River, a brisk mountain stream, during the spring, summer and fall of 1883, will illustrate the clinical history of "mountain fever" as it came under my observation.

CASE I.—Oliver Holmes, æt. 27, miner and prospector, has resided in the Black Range for three years, stopping in a miner's camp in the mountains, very robust, active and temperate in his habits, came to my office April 12th, 1883. From the patient the following history was gleaned. Had ague ten years ago in Illinois; has been uniformly healthy ever since. Began to feel badly two weeks ago; severe headache; back and limbs ached; easily fatigued; no appetite, disturbed sleep and bowels constipated; occasional pain in lower abdomen. Took compound cathartic pills and quinine on three different occasions, but felt no better; finally some of the miners told him he had "mountain fever" and he came into Kingston to get medical treatment. Present condition: pulse 85 and full; temperature (axilla) 100°; tongue heavily coated; countenance haggard, skin ashy and dry; hands and voice tremulous, bowels costive, abdomen swollen and tender in right iliac region; bladder distended with highly colored urine; no appetite, thirsty, general sleeplessness and aching all over the body; gave him fifteen grains calomel with five grains Dover's powder to be followed in six hours with castor oil. After bowels move to have half dram quiniæ sulph. divided into six doses at intervals of two hours; diet, milk, *ad libitum*.

April 16. Called to see patient. Temperature 101°, pulse 85. 8 A. M., had free action from calomel; felt better, and slept some; thirsty, but desires no food; one scruple of quinine was given daily for four days; pulv. Doveri and potas. bromid, 5 grains of the former and 30 grains of the latter at bedtime. Diet, milk and beef tea.

Eighth day. Pulse 90; temperature 101° A. M., 102° P. M.; bowels distended and sore on pressure; an occasional cough, dry and hacking especially in the evening; gave muriatic acid four drops, one teaspoonful of glycerine in wine-glass of water every four hours; to have Boudault's pepsin, 10 grains, after taking milk and Liebig's extract of beef every four or five hours. Body

to be sponged with warm water twice daily. No material change took place until 12th day, when the temperature ran up to 103° A. M. and 104° P. M.; pulse 90 and 95. Epistaxis, diarrhea, bowels tympanitic and tender in right iliac region; tongue heavily furred, edges red, pointed and tremulous when protruded; decubitus dorsal with knees drawn up; urine scanty; cough troublesome at times, with pain in inferior portion of right lung; gave tinct. digitalis, 30 grs., spts. nit. dulc. one dram in water every twelve hours; other treatment, diet and sponge bath continued.

Nineteenth day. Temperature 100° A. M., 101° P. M., pulse 90; other symptoms somewhat improved; some desire for food; no diarrhea; urine copious; sleeps pretty well in after part of the night. Treatment continued.

Twenty-second day. Morning temperature $103\frac{1}{2}^{\circ}$, pulse 90, evening temperature 102° , pulse 90; stupid but not delirious. Treatment continued, except the digitalis.

Twenty-fifth day. Temperature $101\frac{1}{2}^{\circ}$ A. M., pulse 90; P. M., temperature 102° , pulse 90; tympanites subsiding, not so tender; sleeps better; has a relish for food.

Thirtieth day. Fever disappeared. Convalescence was rapid and he made a good recovery.

CASE II. Mr. D. C., æt. 23, native of Canada; ore sampler at the Superior Mine. Never sick before; lived in Colorado for five years; worked in mines.

May 3, was attacked with chill; when fever cooled took twenty grains of quinine. Next morning chill recurred, the exacerbation lasting twelve hours; temperature ran up to 106° .

As soon as temperature began to run down accompanied with moist skin, eight grain doses of quinine at intervals of two hours till half a dram was given. Notwithstanding this the chill recurred next day, but fever was milder and of shorter duration.

Thus it kept up for fifteen days, the fever beginning at noon, and going off near midnight, notwithstanding one scruple of quinine was given every morning.

The quinine was stopped; gave 20 grains of calomel at night; next morning, 10 m. Fowler's solution was given every two hours till eighty drops were taken daily. In three days the chill

and fever subsided. This man took about 300 grains of quinine with but little effect. On the twenty-first day after recovery he was attacked with tertian ague, which was promptly arrested with Fowler's solution. Iodide of iron was given for four weeks. The ague did not recur.

CASE III. Wm. B. *et.* 30, saloon-keeper, healthy and of good constitution, was attacked with general malaise June 1. Took 5-grain doses of quinine till one scruple was taken daily for five days with two purgative doses of calomel, which acted well; no desire for food; sleepless, with a feeling as though suspended in a swing. On the 15th day I was called; found his pulse 85; temperature 100°. No pain in bowels but inclined to be constipated; dry hacking cough troublesome at night; headache and dizziness on attempting to rise. Ordered a half dram of quinine in five doses, at intervals of two hours, which was continued for five days, at the end of which time pulse was 85 A. M. 90 P. M., temperature 101° A. M., 102° P. M.; takes milk and extract of beef regularly; no alcoholics; quinine reduced to one scruple daily. On the 25th day—condition not improved; gave acid hydrochloric in place of quinine with pepsin after meals with lemon drinks. After 30 days patient began to improve and rapidly recovered. This man walked from his house to the saloon, a distance of 80 feet, twice daily during the whole time. Weight 170 pounds, 190 when attacked, only losing 20 pounds of flesh. This is one of the so-called typho-malarial cases, but clearly wanting in any distinctive typhoid symptoms.

CASE IV. Mr. C., *et.* 34, of good constitution and temperate, was attacked with fever September 5th. Supposing it was "dumb chills," he took a dose of compound cathartics, and twenty grains of quinine daily for four days, when I was called. Present condition: pulse 90, temperature 103° A. M., 103½° P. M.; vomits everything ingested; restless and delirious at times. The vomiting kept up for one week; could not take quinine; gave it hypodermically, but to no effect. Finally adopted the old calomel treatment for bilious fever; after two weeks fever subsided and patient rapidly recovered. This was clearly a case of gastric remittent. Antiphlogistic treatment succeeded best.

CASE V. Mr. C., *et.* 32, butcher and of good habits and constitution. Complained of general malaise for ten days prior to my being called. Present condition: pulse 90; temperature 101° A. M., $102\frac{1}{2}^{\circ}$ P. M.; bowels loose; pain in iliac region on pressure. At end of first week condition the same. By middle of second week, temperature 102° A. M., $103\frac{1}{2}^{\circ}$ P. M.; pulse 90; abdomen tympanitic, with diarrhea; no appetite; thirsty, sleepless, and delirious at night. End of third week: pulse 95 A. M., 98 P. M.; temperature 102° A. M., $103\frac{1}{2}^{\circ}$ P. M.; abdomen tight as a drum; pea-soup diarrhea; low muttering delirium, subsultus, tinnitus aurium, epistaxis, and at the end of fourth week hemorrhage from the bowels. At the end of fifth week: pulse 90, temperature 100° A. M., 101° P. M.; mind clear; sleeps well under half dram of potass. bromid., and takes plenty of nourishment; milk and extract of beef, followed with pepsin and glycerine. Middle of sixth week found the pulse 120, weak; temperature 105° A. M., $103\frac{1}{2}^{\circ}$ P. M. Died at the end of the sixth week from perforation of the ileum.

I omitted to say that the rose-colored patches were well marked in cases I and V, but were absent in all the other cases. Each of these cases was called "mountain fever" by the miners, and because I refused to so regard them they concluded I did not know my business.

Cases I and V were clearly enteric fever, the first an abortive type, while the latter was very pronounced. Case IV was gastric remittent while case III presented all the features of the so-called typho-malarial fever, in which the malarial element predominated, but very clearly a case of "walking typhoid fever" in which the abdominal symptoms failed to become prominent; though the conclusion is a very probable one that Peyer's patches were inflamed and gave rise to the febrile condition and nervous disturbances. Case II was a case of remittent malarial fever of the congestive type in which the chylopoietic viscera suffered most.

It is generally conceded that enteric fever owes its causation to effluvia arising from decomposed animal matter, and that malarial fevers are produced by the *materies morbi* arising from vegetable decomposition. In other words, that the former dis-

ease results from the ingestion of the toxic agent, whilst the malarial fevers owe their causation to the combined influences of inhalation and ingestion, but more particularly to that of the former.

I have traveled through White River swamps in Arkansas, where the exhalations from the combined decomposition of vegetable and animal matter caused free emesis in a few minutes. In these localities enteric fever was quite rife, whilst the reported records in medical journals from such localities abound with cases of the so-called "typho-malarial fever," when perhaps a large majority of them were really enteric fever. I have been forcibly struck by the resemblances in the phenomenal manifestations between enteric fever and the so-called typho-malarial more than by the differences. What was known during the late war as "camp fever" is identical with the so-called "mountain fever" as defined by army medical officers. The disease is, in its every component part, essentially malarial, and the prefix *typho* is applied in those cases so profoundly impressed by the *materies morbi* as to be denominated malarial cachexia. This condition has given rise to the so-called "typhoid pneumonia" and "typhoid bilious fevers" of the Southern states; the latter being identical with the "camp fever" of the Union and Confederate Armies, and the "typho-malarial" fever of Woodward, and the "mountain fever" of the pioneer physicians of the Rocky Mountains.

Conceding the fact that "mountain fever" is malarial we should inquire as to its causation.

One would naturally conclude that the Rocky Mountains, which stretch across this continent from the extreme North to the extreme South, ought not to be styled a malarial region.

Some prominent writers of the medical staff in the regular army deny that malarial fevers owe their causation to any toxic agent generated in these mountain regions, but declare these fevers to have been imported. In one sense this may be true; for it is known that this poison may so impress itself upon the system that after removal from the locality where the poison is received to high and healthy regions it often requires four or five years to eradicate it from the system. But what can we

say of those persons who have always lived in the Rockies? They are not exempt from malarial fevers. Hence, we must look to those localities for the causation.

This toxic agent which gives a distinctive name to fevers with periodical exacerbations is everywhere recognized by the term malarial. No chemist has yet been able to demonstrate the existence of malaria. We only assume its existence from certain observed effects upon the organism, just as we do in the case of other poisons which produce certain specific diseases.

Malaria is believed to be the product of organic decomposition in the soils; whatever may happen to be their mineral composition. Water is indispensable to the process; high temperature, although not absolutely necessary, generally aids its development. Marshes which contain a high percentage of organic matter are supposed to generate it in great abundance; hence, the term *marsh miasm*. It is also found in sandy soils, and arid plains, devoid of vegetation; but in all such cases the soil will be found to contain a considerable percentage of organic matter: water will be found not far from the surface, either in the shape of subterraneous streams, or detained by beds of clay below the sand, preventing its free passage, and keeping up evaporation. Hard rocks, such as granite and lime-stone in a disintegrated state, are known to generate malaria. A remarkable example is the island of Hong Kong, which consists entirely of weather-beaten and decayed granite. In such soils, so long as they remain undisturbed, the existence of malaria may not be suspected. In the case of Hong Kong it was not until extensive excavations for building purposes were made into the decaying granite that violent and fatal malarial fevers appeared. Only two per cent. of organic matter was found by Dr. Parkes in these soils.

After such examples, what must we conclude with reference to our Black Range and other mountain ranges in New Mexico? The excavations made in our mountains, though in solid rock, for mining purposes are prolific sources for the generation of malaria. The same holds good with regard to our mesas and extensive arid plains. Malarial fevers are rife all over this country.

When a person has for a long time suffered from the toxic influence of malaria, experience has proven that a curious impress of periodicity is sure to show itself in all his subsequent ailments.

Dr. W. C. Maclean puts forth the opinion that this impress of periodicity is never eradicated. This observation is one that readily explains the marked periodical character manifested in all diseases prevailing in such districts. Hence, many erroneous ideas have crept into medical literature, giving rise to new terms applied to well-known diseases whose pathology and clinical history have been established for ages. For example: take a person subjected to malarial influences for a life-time, sick with enteric fever, dysentery, pneumonia, etc., and observe the periodical nature of the pyrexia. Would any intelligent observing physician, in recognizing the pathognomonic signs of these diseases through the malarial mask, hesitate for one moment as to the genuineness of the disease afflicting the patient? Would it not be as truly enteric fever, dysentery or pneumonia, as though there were no malarial manifestations?

And why all this parade in medical literature about new and hitherto unknown diseases occurring in the mountain regions of our country? Among physicians, human nature is the same as among other people; all are alike liable to strain at gnats and swallow camels!

A BAD COLD.

BY W. F. GRINSTEAD, M. D., CHARLESTON, MO.

[*Read before the Southeast Missouri Medical Society.*]

“DOCTOR, I have an awful bad cold,” is the dictum with which the members of this society are saluted on every hand, from October till April. We are accustomed to think lightly of this subject, so that its etiology and pathology ordinarily pass unnoticed. If, however, we observe the great suffering

that it sometimes entails upon our patients, and especially if we happen to become the subjects ourselves of the excruciating neuralgias that it lights up about the head, of which pangs I, myself, have had a taste, we are apt to dwell a moment upon its nature.

A bad cold is essentially perverted nerve function. Much error is prevalent respecting both its etiology and pathology. We say to our clients, and our clients say to each other: "You must not go out to-day, the air is very cold. You will take cold and be sick;" when, in fact, it is impossible to freeze any body into a bad cold. We have patients who are positively frozen. Their ears are puffed and blackened, their toes are sloughing from their feet; and yet they have not a symptom of catarrh. The fisherman and the duck-hunter are warned that they will certainly sicken and die from dabbling in the cold water. Heedless of such warning, they pursue their vocations, fall in heels over head, crawl out drenched to the skin, from crown to sole; but do not contract a bad cold.

It is said that "in winter the puddlers of a rolling mill have often to pass ten times an hour from the immediate neighborhood of a furnace, to the chill draft of the open air; their skins become rough as an armadillo's; their hair becomes grizzly or lead color; but no catarrh." Some persons have such a dread of being wetted by rain that they are almost hydrophobic. They run themselves near unto exhaustion to get out of a thunder shower; when, in fact, it would do them no harm to walk leisurely in it. What then gives us a bad cold? It is standing, sitting or lying *motionless* in a cold atmosphere. The liability is greatly augmented by being enveloped in damp clothing or bedding.

One may ride or walk in a temperature at zero, and be absolutely frozen; but not take cold. On the other hand, this same person may sit or lie *motionless* in a temperature of 60° above zero, clad in his accustomed winter apparel, and will soon recognize the stuffed nares, fulness about the head, with perhaps the husky voice of catarrh.

Nature may come to his rescue with a series of sneezes and shivers, which are her means of protecting the organism against

catarrhal invasion, and preserving the equilibrium of the nervous system. If, however, the exposure be protracted, sneezing and shivering become inadequate to the task, and nature is compelled to submit. The organism now suffers the painful consequences.

In the first step of the morbid process the skin and mucous membranes become chilled. The intricate net-work of nervous filaments that underlies these structures receives a profound impression.

Through the multitudinous afferent nerves, which act as news carriers for the brain, this impression is communicated to the cerebral centres. A profound shock or stun to these organs ensues. The mucous and integumentary surfaces are now measurably removed from their normal cerebro-spinal influence. The ganglionic nervous system is likewise removed from this sovereign power. This system of nerves, the function of which is directed mainly to the circulatory apparatus, now steps forward and takes possession, unduly contracting the entire capillary system. We now notice a pale, livid aspect of the body with a small hard pulse. That the sympathetic system of nerves is much slower to receive impressions than the cerebro-spinal, is a physiological fact. Therefore, during this parietic condition of the latter system, the former reigns supreme. Now, if Nature's efforts, referred to above, re-establish the normal balance between these two systems of nerves, the brain is aroused from its state of lethargy, and at once represses the vaso-motor system into its physiological sphere.

A warm perspiration ensues and the organism is restored to health.

On the contrary, if Nature's efforts are futile, this obtunded state of the brain continues; and not only this, but the shock is ultimately propagated to the ganglionic centres. Now what phenomena do we observe? Clearly those of sympathetic paresis. Instead of the healthy flesh-tint and perspiring surface of the body, we have a morbid degree of vascularity. Small arterioles that lie unnoticed in health are now felt to pulsate. The whole capillary system is turgescient. Assimilation and nutrition are perverted, and we have the heat of fever. All

these phenomena are the result of a relaxed condition of the walls of the blood-vessels, and an unrestrained heart. The inhibitory pneumogastric has withdrawn its watch-care from this organ; and the want of vascular contractility which the trophic nerves supply, leaves little resistance to its tumultuous heaving. We now have a fully developed bad cold. Our patient complains of headache, sore throat, occluded nares, perverted taste, anorexia, pyrexia, interspersed now and then with subjective rigors, and other symptoms too common to require mention. In this connection I desire to call attention to an important blunder which I fear some of us have fallen into. It consists in denominating this condition catarrhal fever. Not long since a well-to-do farmer, within the boundaries of this association, informed me, with great complacency, that his wife had recently suffered from an attack of catarrhal fever, and the physician whom he called had relieved her in three days. Now I did not inform him, of course, to the contrary, nor did I expatiate upon the course and duration of this disorder; but knew quite well that he labored under a pleasing delusion. It must be admitted that the pyrexia of a bad cold is literally catarrhal fever; but, according to our accepted nosology, it is quite a distinct condition. True catarrhal fever is a catarrhal inflammation of the bronchioles, with a similar involvement of the gastro-intestinal tract, characterized by vomiting and diarrhea, with, perhaps, a tint of blood in the stools.

The symptomatology and pathology of the two conditions are so distinct that such a misnomer is unscientific and inexcusable.

SOME IDEAS ON ANTISEPSIS AND ANTISEPTICS.

BY P. B. CHRISTIAN, M. D., LITTLE ROCK, ARK.

[Read before the State Medical Society of Arkansas at the Ninth Annual Session, Little Rock, April 30, May 1, 2, 1884.]

WHILE the medical profession should be ever alive and active in nourishing and developing those principles that are known and recognized as true beyond question; yet it is none the less important that it should be just as dili-

gent in the matter of separating and casting aside those principles and measures that have been found to be false and erroneous.

Truth is to be evolved and strengthened mainly by investigations and practical experience, and thus it is the general practitioner of medicine occupies the most favorable position for testing new ideas and methods, and for distinguishing and separating the true from the false.

Means and measures to be available and effective for good must be founded on true principles and must be applied and carried out in conformity therewith. It becomes a misfortune and a matter of regret, when in the heat and enthusiasm of progress, principles are lost sight of in the eagerness to discover and promulgate new ways and methods. No good is thus accomplished, and disastrous results may follow.

The foundation of medicine has long since been laid in truth; and it should be a matter of pride on the part of the builders to see that no false material gets into the superstructure.

A great deal has been said and written of late concerning the matter of antisepsis and the various ways of applying its principles; and partly with the view of presenting to the society my ideas on this subject, but principally for the purpose and with the hope of eliciting discussion and thereby drawing out the views and opinions of others, I have concluded to write this paper.

Antisepsis as a conservative and prophylactic principle is truly and most beautifully manifested in all the reparative processes of nature. The first act of nature following the infliction of a wound is antiseptic. The pouring forth of plastic material, which coagulating protects the divided and exposed parts from the air with its irritating influences, involves the first and most essential truth of the whole principle.

The efficacy of exclusion of atmospheric influences as an antiseptic measure is well illustrated by subcutaneous injuries, in the case of simple fracture of the leg, for example, from direct violence. Here we have a most severe contused and lacerated wound, and the interstices between the mangled tissues are filled with extravasated blood and serum. With the sole exception

that the skin is not divided so as to expose the original parts to the atmosphere, there are present in an aggravated form those conditions which we used to regard as inevitably involving violent inflammations, followed by the separation of sloughs under suppuration with corresponding constitutional disturbance and serious attendant risk of fatal blood-poisoning. Yet, thanks to an unbroken integument, all proceeds quietly and surely towards recovery; the effused blood is absorbed, and any portion of tissue killed by the violence is similarly disposed of.

The management then of wounds in general should, it seems to me, be such as to conform to and imitate as nearly as possible those principles and operations of nature, as manifested in the various processes of repair; and such measures be adopted and employed as will best aid and encourage her efforts in this direction, viz., the removal of all foreign bodies, careful coaptation and holding together of divided structures, a dressing that will irritate least and exclude air most effectually, perfect cleanliness in all appliances and surroundings, and an abundance of pure fresh air. Such are measures that are both rational and most necessary in the application and carrying out of antiseptic principles. It should, however, be a matter of caution not to carry even these important measures to that extent by which Nature will be interfered with or retarded in her efforts at repair, for the most necessary and salutary proceeding, when improperly or excessively employed, may become a most harmful one. Drainage as a measure of cleanliness and of keeping wounds, and especially deep ones, free from irritating matter, is very important; and if in the performance of an operation or the dressing of a wound due regard be paid to the operation and requirements of nature in this particular the whole matter will regulate itself, and that, too, more effectually and antiseptically than can be done by artificial means, such as draining tubes of rubber or any other material.

To place one of these tubes either of rubber or of decalcified bone in the bottom of a wound, the very place where least disturbance is most desired, and to lay these not only as a source of irritations, but as a nucleus for the collection and propagation of septic material, is to my mind, a measure wrong both in

theory and practice, and while failing to accomplish the purposes for which it is intended, calculated to do much harm. While the importance and efficacy of cleanliness itself as an antiseptic measure is beyond question, yet it may be carried to that extent or be employed in a way and under such circumstances as to render it highly objectionable as a means of doing good. It has been lately recommended, and by very high authority too, that for several days prior to parturition and for several days thereafter vaginal injections of an antiseptic character should be frequently used with a view to the prevention of puerperal septicemia. A great many other so-called antiseptic details are laid down by this same high authority bearing upon the parturient state, the majority of which appear so highly impracticable and so much at variance with the laws of nature as to be not worth your consideration as general common sense practitioners of medicine.

With regard, however, to the matter of vaginal and uterine irrigations immediately following the completion of labor and to be kept up for several days, this seems to me not only a most unnecessary proceeding but one that directly antagonizes the reparative process, and one too that must be fraught with the most direful consequences.

If puerperal fever be septicemia, and the latter be due to the absorption of septic material from abrasions along the genital track following labor, then it does appear to me that by early and frequent irrigations, as has been proposed, we not only fail to arrest or prevent the introduction to the system of this septic matter, but with every use of the syringe we but open the door for its more effectual and speedy entrance, and at the same time retard to a larger extent the healing processes of nature. Such a measure under such circumstances, with no exceptions or modifications, is not in accordance with true antiseptic principles, nor with the laws governing a natural process, which, as a rule, is unattended with changes or followed by evil consequences. It is furthermore a measure that is not only meddling in a high degree, but one that is calculated to bring disrepute upon true and honest medicine, and especially the art of obstetrics.

Cleanliness of patient and all surroundings without being carried to the extent of interference or annoyance, together with good ventilation and an equable temperature, are measures that are truly antiseptic and all sufficient and cannot be too highly commended not only in the lying-in-chamber, but under all circumstances of disease or injury.

It is certainly gratifying to note the many expressions of disapproval that have come up from the profession throughout the country since the publication of Dr. Thomas' paper on antiseptics as applied in the prevention of puerperal fever. And it is to be hoped that none will be induced on account of the prestige of such recognized authority to adopt or promulgate such erroneous ideas and methods. In this day and age, when medicine, it would seem, has become carbolized and nearly all that there is of antiseptics has concentrated itself in carbolic acid, it may perhaps be considered presumptuous on my part to cast even a single stone of adverse criticism at this stupendous so-called antiseptic movement.

I believe there is very little antiseptic virtue in carbolic acid. If there is, it must consist in the odor of the drug, and that this is ineffectual beyond being very disagreeable is, to my mind, a fact that will in the near future be fully recognized and appreciated.

Listerism is carbolic acid, and all that is claimed for the system, I believe, amounts to nothing as far as the acid is concerned. Take away carbolic acid from Listerism, and what is left is cleanliness carried to a very high degree of thoroughness, and it is in the cleanliness which is thus necessarily involved that all the antiseptics consists. Use the solution, the spray and the acid as recommended, but without the carbolic acid, and observe all the precautions that Listerism enjoins, and it is my opinion you will get all the benefits that are claimed for it.

Is it true that the air we breathe and without which we cannot live is filled with living germs and reeking with poisonous influences? Is it true that every wound is a hot bed where these germs may propagate and develop septic material, by which the whole organism becomes infected and poisoned? Is it true that all septic disorders and manifestations have their

origin without the body, being due solely to external conditions and influences? And is it true that in the correction or destruction of these conditions and influences by the employment of agents possessing specific properties as antiseptics we thus neutralize the main elements in the production of septic disease and meet fully the ends of true antisepsis?

These are questions, and there are others of similar importance that need to be investigated and solved before one can arrive at any positive conclusion respecting the virtues and availability of any of the various agents that are ostensibly employed and advocated as antiseptics.

It does not seem to me that true antiseptic virtues consist in counteracting or dispelling a fetid odor simply without arresting the process of putrefaction in which it has its origin.

Carbolic acid may effectually overcome and correct bad smell, but simply by supplying another in its stead, and one perhaps as offensive.

There undoubtedly exist causes and conditions within the body that predispose to sepsis and are perhaps more potent for evil developments when properly excited than can exist in those influences that operate from without.

True antisepsis, therefore, in its full meaning should consist in the general care and attention given both to patient and all surroundings, the close observance and correction of all septic conditions and influences from within as well as from without, and in the judicious employment of such means and measures as will accomplish this most effectually and with least disturbance of natural operations. Reliance on this or that so-called antiseptic to neutralize harmful influences supposed to exist, or simply to correct a bad odor, while condition and surroundings, more real and powerful causes for evil, remain neglected, is not that practice which should commend itself to intelligent thinking physicians.

JOURNALISTIC ENTERPRISE.—*The New York Medical Record* and the *Philadelphia Medical News* each gave full telegraphic cable reports of the International Medical Congress at Copenhagen.

CASES FROM PRACTICE.

ON CERTAIN FEATURES OF A CASE OF GOUTY
PROSTATITIS.

BY GEO. HOMAN, M. D., ST. LOUIS.

[Read before the St. Louis *Mélico-Chirurgical Society*, July 8, 1884.]

Mr. A., an American of English ancestry, aged about 40 years, married, by occupation a manufacturer, of full habit, and rather inclined in his daily fare to highly seasoned dishes of animal diet, became aware while in apparent health, in the latter part of June, 1883, of an uneasy feeling which was referred to the neck of the bladder, and further became conscious of a painful sensation in the perineum, which was increased by sitting, and especially when he was jolted or shaken in driving over rough ground.

I first saw the patient for this ailment on or about July 1, at which time there was some feverishness and constipation; the urine was moderate in amount, of a high color, very strongly acid, and somewhat above the normal specific gravity; it presented a brownish deposit on standing, and the need to void urine was increased, more particularly at night.

Immediate rest in bed was urged, but compliance in this respect was deferred through stress of business until July 5. At that time a slight amount of turbid mucus could be seen at the meatus, and the prostate was enlarged and tender to the touch.

Careful inquiry into the previous history as to the cause of the prostatic disturbance gave no clue that was definite, his previous general health having been undoubted by himself and family, although he was subject to great business anxieties and often to the fatigues of travel. He was usually temperate in the use of wine, although at rare intervals would indulge somewhat freely. His good record for continence could not be impeached.

Treatment by laxatives, alkaline diluents and anodynes, with

perineal counter-irritation, was followed for about ten days, when severe orchitis on the right side set in, lasting for two weeks or more, during which time the other symptoms were apparently lessened in severity. Partly through pain at the neck of the bladder in urinating and to save the inflamed testicle from motion, and partly because of the inability of the patient to empty his bladder completely, a soft gum catheter was used morning and evening to draw off the urine. The demand upon the patient to pass his water would come with imperative suddenness, and would be responded to with an urgent haste that was a striking feature of the case. Severe spasms of pain were felt at such times, and the action and attitude of the patient signified a guarded slowing up and closing of the act of urination.

A close study of the history and symptoms presented, led me to the opinion that there was a distinct element of gout in the case, although I could get no good backing to confirm this belief in available medical literature, until early in the following winter, when I found in the *Lancet* for Nov. 24, '83, an article on Prostatic Gout, by Mr. Reginald Harrison in the course of which he says: "Gouty prostatitis, so far as I have observed it, occurs in persons who, though having a gouty diathesis, either hereditary or acquired, have previously remained free from the more ordinary attacks of this disorder. * * Like gout acutely affecting the great toe, the attack usually comes on at night, the patient experiencing severe pain, which he refers to the perineum, and not infrequently likens to a hot cork. Though painful, the desire to micturate is irresistible, and is accompanied with spasms, which often render any attempt to retain urine, even while the patient is getting out of bed, almost impossible. Sympathetic pain is at the same time experienced in the groin, or in one or both testicles, rendering the latter extremely sensitive to the touch. Exploration of the rectum with the finger * * shows the prostate to be both tense and tender. During the day the symptoms generally abate, to recur at night. Like the analogous manifestations in the great toe, these acute prostatic attacks are not usually of long duration, as they merge into a chronic form, which will presently be noticed. The urine is loaded with lithates, and is invariably of an acid and irritating character. After an acute attack the prostate is often left excessively sensitive, and this is a point worthy of special consideration. After an acute attack of gout in the foot the limb is tender, and the person is more or less lame. So with the prostate: it remains sensitive, and the patient dreads to call forth sufficient muscular force to completely empty the bladder. In fact, he lets his urine dribble off voluntarily, and retains a portion of it, so as to form a

sort of water bed behind his prostate. In this way he wards off from his sensitive gland the last and most painful efforts of each act of micturition. Watch a patient with a prostate tender from gout pass water, and the manner in which he cautiously eases off the pressure as the act is about to close is very significant. I have satisfied myself on several occasions that a degree of retention was thus caused by passing a rubber catheter and removing an ounce or so of urine, when it was believed by the patient that he had emptied his bladder."

Mr. Harrison further remarks: "In the treatment of acute prostatic gout there are one or two points to which prominence is to be given. In the first place it is always associated with a highly acid condition of the urine, and with an excess of urates as well as of uric acid. The administration of alkalies under these circumstances can hardly be regarded other than as a natural expedient. It has been stated that the neutralization of these urine-salts by the alkali is little else than masking the disorder, as the cause of it remains untouched. But there is a mechanical aspect to this question which must not be passed by entirely without notice. One effect of the administration of alkalies upon such urine is not only attended with a marked disappearance of the urate salts from the urine, but careful microscopical observation has shown that the use of alkalies is frequently followed by a change in crystalline form which is of considerable advantage to the patient, though he may still continued to void urates. When the degree of vesical and urethral irritation was intense, I have seen all this disappear coincident with a change in the crystalline form, being brought about by some artificial means."

The patient was considerably improved by the end of August, but still very weak, and was resolved to attempt the journey to New York, although this was discountenanced by me, his appetite being but indifferent and the prostatic pain still present at times, chiefly at night. After some delay en route, through pain and fatigue of travel, he reached the Jersey coast, where he spent some little time without much benefit, finally proceeding to New York City, where he did much better in all respects.

He came back to St. Louis for a few days, after a month's absence, showing some general improvement, and then returning to New York, went abroad late in the fall for the sake of the sea voyage and to get free from the cares of business, the prostatic symptoms having by this time merged somewhat into the chronic or at least sub-acute form. Mr. Harrison remarks on this point: "The chronic form of the disorder, where the prostate remains tender for a considerable period, or until it is relieved by the treatment, requires careful consideration, as it is a far more frequent

cause of residual urine than is generally supposed. * * The symptoms * * are often anomalous and difficult to sum up; they may be briefly enumerated as urine habitually loaded with uric acid and urates, unnatural sensitiveness of the prostate to the touch or even to pressure applied to the perineal region, and the presence of uncomfortable sensations referred to the neck of the bladder, as if there was a swelling or the viscus was not emptied, the latter being practically well founded." He further points out the difference between this affection and hypertrophy of the gland with sacculation of bladder and residual urine, and the appropriate differing treatment of each, one being medical and the other surgical, in the one case habitual catheterism being hurtful, in the other needful.¹

The patient while in London during the winter consulted Sir Henry Thompson, who, after a careful examination, substantially confirmed the indicated diagnosis and continued the line of treatment prescribed. He then made a tour of Europe, at times suffering prostatic distress, but mending measurably all the time in appetite, strength and spirits. He returned to St. Louis for a few days and was seen by me about the 1st ultimo. I had no opportunity to examine the condition of either prostate or urine, but from his statements learned that there had been a gradual abatement of the primary trouble, although twinges of pain were sometimes still felt at the neck of the bladder following fatigue, or in cold or damp weather.

Aside from the somewhat novel interest attaching to this case from the rarity of gout in the Mississippi valley and the comparative infrequency of prostatic involvement in the usual course of the disease, a striking feature was the one to which Mr. Harrison directs attention, namely, the extreme urgency shown and the nearly characteristic attitude of the patient when replying to the call to pass water. The use of bland alkaline diuretics was attended with much relief, and seemed to support the opinion expressed on this point by the authority quoted, although no microscopic examination to determine the presence of urinary crystals and their forms was at any time made.

¹ Mr. Harrison speaks favorably of the effect of the Giesshuebler Sauerbrunnen (Carlsbad) water in this affection. In the treatment of the case mentioned very good results followed the use of water from the Buffalo Lithia Springs of Virginia.

EXCISION OF A PIECE OF INTESTINE—RECOVERY.

BY JOSEPH GRINDON, M. D., ST. LOUIS.

[*Read before the St. Louis Medico-Chirurgical Society.*]

On June 28, at 3 P. M., M. L., a colored woman, æt. 30, by occupation a servant, being at that time four months advanced in pregnancy, was assaulted by her husband, who, after ineffectually discharging at her his pistol, drew his pocket-knife and inflicted upon her several wounds hereinafter to be described. I reached the patient almost immediately after, having in fact heard the report of the pistol, and proceeded to make an examination.

In the left groin, running parallel to Poupart's ligament, and about an inch above it, was an incision which extended through the skin and fascia from a point just internal to the epigastric artery, narrowly missing that vessel, three inches toward the median line. The opening through the muscles and peritoneum, however, into the abdominal cavity, was not more than half that length, as the cut was tailed at each end. Through this opening there had protruded a mass of small intestine, mesentery and omentum. There had passed out probably between six and eight feet of intestine.

In one of the foremost loops were to be seen three cuts or tears, all communicating with the lumen of the gut, and close to the mesenteric junction. Two were on one side not quite two inches apart, and one on the other, as it were behind and between the first two. It seemed as though all three had been done at one thrust, the instrument passing in at one side, nicking the opposite wall, and passing out again on the same side of the bowel as it penetrated. The largest of these openings easily admitted the finger, the other two being much smaller, but through all there oozed blood and fluid feces, there being no such valve-like action of the mucous lining, closing the perforations through the outer tunics and preventing the escape of intestinal contents as was observed by Mr. Travers and Dr. Gross and as is described by Erichsen, Drutt and other authors. The first two mentioned, truly, did admit that there is *some* extravasation in almost every wound of the bowel. The condition of things here met with agreed with the observations of Dr. Parkes, of Chicago, in his recent experiments on dogs. He says,

"Extravasation of the contents of the tube occurred in every case where the tube was wounded;" and again, "Any perforation of the bowel, even a needle perforation, means extravasation."

These cuts were not clean incisions, but contused, lacerated wounds, presenting the appearance of having been inflicted with a dull weapon. There was considerable ecchymosis of the surrounding intestinal walls, as also into the adjoining portion of mesentery. The protruding mass of intestine and mesentery was so tightly constricted at the opening through the parietes that it was with the greatest difficulty that the finger could be introduced into the abdominal cavity. This served a good purpose in preventing the flow of fluids back into the cavity. It was a matter of surprise to me that so large a mass could have found its way through so small an opening.

The other wounds were an incision about four inches long on the anterior aspect of the left forearm, extending down to the muscles but not wounding the large vessels, another superficial cut over the last cervical vertebra, and still another over a point about midway of the left eleventh rib. These cut no figure in the case. The last two were not discovered until the patient reached the hospital.

Dr. W. M. McPheeters coming into the room, I requested his aid, when we proceeded as follows:

It was at first proposed to throw ligatures about the wounds. The number and extent of the latter, however, would have made this manœuvre result in too great a narrowing of the lumen; on the other hand, the ragged character of the wounds, and the contused and ecchymosed appearance of the surrounding tissue did not encourage us in essaying to stitch the edges together. We therefore proceeded to remove a section of the gut about two inches in length comprising the entire circumference and including all the injured portion. In trimming off along the mesenteric border, a number of vessels were necessarily cut and tied. There was considerable eversion of the mucous membrane at each severed end; this was trimmed off with the scissors and the gut brought together. Twelve or fifteen sutures of ordinary surgeon's silk were used; the needle being each time carried through all the coats in each direction. An interrupted stitch was put in at the mesenteric border, one directly opposite, and one half-way down on each side: between these was run a glover's suture. The free mesenteric edge was merely doubled over and left so.

The intestines were now well sponged off with clean water, no antiseptics of any kind being used, and returned to the cavity of the abdomen. The omentum slipped back without much trouble, but reducing the intestine, distended with gas from the removal of accustomed pressure and relaxation of the muscular tunic, proved to be no easy task. As one loop would be forced in, another would slip out. By slightly enlarging the opening, however, and making continuous and equable pressure with the extended hand while the patient was brought partially under the influence of chloroform and the thighs flexed, the reduction was finally accomplished, the last loops being livid, intensely congested, and of most forbidding appearance. The external wound was closed with a stout piece of silk passed through the entire thickness of the abdominal wall, a compress applied, and the patient despatched to the City Hospital. During the operation she had received two dram doses of laudanum.

Through the kindness of Dr. D. V. Dean, superintendent of the hospital, and Dr. H. Brookes, assistant, I am enabled to give the subsequent history of the case.

June 28, 7 P. M.—Pulse weak and rapid, temp. normal, a hypodermatic injection of morphine, gr. $\frac{1}{8}$, given to relieve pain and discomfort.

June 29.—Pulse 120, temperature 98.5° , weak from loss of blood. Enema of one-half pint given without result. Vomits immediately on taking food.

June 30.—Pulse 160, temperature 103° . Enema of one pint. Patient suffers little or no pain, quiet, skin moist, vomits less.

July 1.—Pulse 112, temperature 99.5° . Bowels moved at 12 P. M.

July 2, 12 M.—Vomiting ceased. Gave food per rectum; 7 P. M. Pulse 124, temperature 100° . Nutritive enema retained.

July 3, 8 A. M.—Pulse 124, temperature 98.5° . Complains of no pain, rests quietly; 7 P. M.—Pulse 120, weak, temperature 98.5° . A slight chill.

July 4, 8 A. M.—Pulse 120, strong, temperature 98.5° ; 12:30 P. M. Bag of waters broken; 7 P. M.—Pulse 108, temperature 101.3° .

July 5, 5 A. M.—Patient delivered of a four month's fetus, after eighteen hours' discomfort. Pains were weak, lasted one hour. Placenta delivered an hour later; 8 A. M.—Pulse 132, temperature 102.2° . Patient weak and restless; 12 M.—Pulse 120, weak.

July 6, 8 A. M.—Pulse 124, temperature 100.5° . Patient comfortable; 7 P. M.—Pulse 124, temperature 101.5° . No vomiting.

July 7, 8 A. M.—Pulse 112, temperature 98.5°. Patient comfortable; 7 P. M.—Pulse 124, temperature 97.7°. Some meteorism; wound is again discharging.

July 8, 8 A. M.—Pulse 128, temperature 100.5°. Is nervous and weak. Feels hungry; 7 P. M.—Pulse 132, temperature 100.5°.

July 9, 8 A. M.—Pulse 108, temperature 99.5°. Feels comfortable. not hungry; 7 P. M. —Pulse 120, temperature, normal. Complains of external wound.

July 10, 8 A. M.—Pulse 112, temperature 98.2°. Perspiring, pain and discomfort at external wound; 7 P. M.—Pulse 120, temperature 98.2°.

July 11, 8 A. M.—Pulse 120, temperature 98°. Bowels moved.

July 12, 8 A. M.—Pulse 108, temperature 98°. Bowels moved. Patient quiet and comfortable.

July 13, 8 A. M.—Pulse 92, temperature 98.2°. No pain.

July 14, 8 A. M.—Pulse 92, temperature 98.2°; 7 P. M. Pulse 120, temperature 99°. Patient had a soft, yellowish stool, corresponding to the character of food taken since admission to hospital, showing for the first time an open way.

July 15, 8 A. M.—Pulse 92, temperature 98.5°.

July 16, 8 A. M.—Pulse 92, temperature 97.7°. Patient cheerful.

July 17, 8 A. M.—Pulse 76, temperature normal. Comfortable; no pain, some appetite.

July 31.—Improving rapidly; is now able to sit up and walk a short distance. Wound has almost healed.

August 6.—Patient left hospital.

August 9.—Patient called at my office to say that she was doing well. Eats what she pleases, feels no pain, but is still weak.

August 20.—She reported herself quite well and strong.

The points about this case to which the reader's attention may more particularly be called are:

1. The use of no antiseptic or germicide, except water. The surroundings were all of an unfavorable nature, the work being done in a back kitchen. It was a very hot day and the patient lay next to a hot stove.

2. The fact of the woman's being in the puerperal condition not interfering with the successful issue of the case. Her former pregnancies, extending over a period of six years of married life, had resulted as follows, given in the order of their occurrence: A miscarriage at eighth months (?); one at five months; a birth at term;

a miscarriage at seven months, one at five months and one at four.

3. The carrying of the sutures into the calibre of the gut, and not leaving the mucous lining untouched as recommended by Parkes and others. The mucous membrane which rolled out was trimmed off as has been stated, still it is highly probable that at one or more points portions of this surface were brought into apposition with each other. How was union here effected? Mr. George Pollock in Holmes' System of Surgery gives an explanation as follows: "If the margins of each end of the divided bowel are but accurately adjusted to each other, and maintained in perfect apposition by sutures (whether or not the mucous or serous surfaces be made to touch) the divided portions are united at first, *not* by any act of union *between* the surfaces in contact, but by the effusion of fibrin around the once separated, but now approximated and contiguous extremities; and thus does this fibrin not only maintain their conjunction, but it also, by adhesions, fixes the injured portion of the bowel to the adjacent surfaces of peritoneum, either visceral or parietal." Mr. Travers, on the contrary, observes: "The opposed villous surfaces, so far as my observation goes, neither adhere nor become consolidated by granulation." Drs. Gross and Petrequin, however, arrived at the conclusion that union does occur between the edges of the divided mucous membrane. Dr. Parkes says, with others, that the stitch must always include peritoneum and muscle, but never go through the mucous membrane. We must, however, agree with Mr. Erichsen that, "This advice * * * is extremely difficult to follow." He continues: "The safer plan is doubtless to carry the suture through the whole thickness of the gut, bringing the stitches out at about one-sixth of an inch from the edge of the cut, in such a way that the serous surfaces are brought into apposition."

The question might be asked, why excise at all, why not merely stitch up the wounds? I have already spoken of the unpromising look of the cut edges, but I may again quote Parkes. In his experiments, "When several wounds occurred close together, one piece, even if it amounted to ten inches, was removed" and again: "Wounds affecting the mesenteric border of the bowel were always the most serious and always required complete resection of the part affected." And again "When several wounds occur, say within four inches apart, make one resection to cover the whole."

The creation of an artificial anus, as recommended by many writers, would hardly, we think, be urged in the face of recent advances in surgery.

Another interesting question regards the final disposition of the sutures. What became of them or where did they go? Miller, Erichsen, Druitt, Holmes, Gross, Ashhurst, and the weight of evidence teach that they pass into the bowel and are so cast out. I cannot do better than to quote again from Mr. Pollock: "This much, therefore, is evident; First, That soon after the application of a ligature or suture to any portion of intestine, fibrin is effused on its surface, and the ligature becomes thus shut out from the peritoneal sac. Secondly, The ligature equally soon commences to destroy that portion of bowel which is surrounded by the silk. Thirdly, That as the mucous membrane, (forming one of the layers of that portion) dies, or ulcerates, it opens inwards a path of escape for the ligature, which is only complete when each coat of the bit of intestine is entirely cut through; and, Fourthly, That this path opens *into* the bowel, not *from* it."

MISSOURI MEDICAL AND SURGICAL DIRECTORY.—We are informed that Dr. C. R. Ammerman: of Lewistown, Mo., has in preparation a directory of the Medical Profession of this state, which is to be ready for distribution about Jan. 1, 1881.

"It will be an 8vo volume, and will contain the names, post office address, and professional status of the physicians; the names and residence of the officers and members of the various local and state medical societies of Missouri; the members of the various National Medical Associations,—Regular, Eclectic and Homeopathic; of the State Board of Health; rosters of the U. S. Examining Surgeons for pensions for the state, and Medical officers of the Missouri National Guards; Medical Colleges, State Charitable Institutions, Hospitals, Medical Laws, Fee Bills, etc., etc., etc."

Such a work carefully prepared will be of great service to very many of us. It is hoped that the profession through the state will give its hearty support and co-operation in the endeavor to make the directory complete and perfect. Let each one send to Dr. Ammerman his name, post office address and county, place and date of graduation, name of college or school attended.

The work will be sold by subscription only at \$2.00 per copy post-paid and the edition published will be limited to the number of subscriptions received. Subscriptions should be made early in order to secure copies.

EDITORIAL.

INOCULATION OF ERYSIPELAS VIRUS IN A CASE OF
CANCER.—DEATH FROM ERYSIPELAS.

It has been thought that erysipelas, in the course of the changes impressed by it upon the system, in some way favorably modifies the activity of malignant tumors.

Dr. Janicke, of Breslau, in a case of hopeless recurring cancer of the breast, concluded to inoculate with erysipelas virus. (*Centralblatt f. Chir.* No. 25, 1884). The patient was a woman of 40 years, already twice operated on for cancer of the left mamma. The growth had reappeared with extensive involvement of the axilla; the pains were excessive; general appearance, that of health. Evidently further operation was out of question. A particle of the erysipelas micrococcus, that had been cultivated in gelatine, about the size of a pin's head, was rubbed into scarifications made in the skin over the cancer; the space scarified measured a square centimeter.

In the evening of the same day—11 A. M. was the time of inoculation—there was a chill and afterwards elevation of temperature. Next morning nearly the whole left pectoral region was covered with the erysipelas flush, and there were symptoms of increased fever.

The symptoms increased until upon the fourth day collapse set in, and death ended the experiment. Stimulants were unavailing, the heart probably having been weakened by the original disease. The cancer mass as a whole had softened and somewhat shrunken so that the overlying skin, at first tensely stretched, could be

raised in little folds. The post-mortem revealed that the micrococci had penetrated along the abundant ramifications of the plentiful connective tissue into the growth itself, inter-penetrating in places the cancer elements. Cutting through the growth down to the ribs, extreme serous saturation of the parts was found and a corresponding softening. The doctor thought that this too intense action of the erysipelas micrococcus might be avoided by the use of a more modified culture.

PROPHYLAXIS AND TREATMENT OF MALARIA.

To physicians practising in the Valley of the Mississippi and in other parts of our country, as well, there are few questions of greater practical interest and importance than those which were presented at the Copenhagen International Medical Congress, by Prof. Tommasi-Crudeli.

Having discussed the natural production of malaria and the possible methods of rendering salubrious districts now malarious, he considered the question of the prophylaxis and treatment of malarial disease.

While collective or racial acclimation certainly existed in the past and does to some extent exist at the present time among barbarous people, there is nothing practical for civilized people of our day in this fact and there is no such thing as individual acclimation to malaria. In Italy this subject has been carefully studied and the results of Prof. Tommasi-Crudeli's observations during the last few years demonstrate that the most efficient prophylactic agent against malaria that we are now acquainted with is arsenic. Since 1881 he has induced the officials of some railroads in Southern Italy and a number of large proprietors to repeat on a large scale experiments which he had made less extensively the preceding year.

In spite of the difficulty of testing such a remedy thoroughly and

efficiently on account of the reluctance of patients and of physicians to administer it in efficient doses, the attempt has been completely successful.

The general testimony from the collected facts proves that when the administration of arsenic is begun some weeks before the presumed season for the appearance of the fever, and when this is continued systematically through the season, the power of resistance of the human organism to malaria is increased. Many gained complete immunity, others only a partial immunity, that is, they were sometimes attacked by the fever but only in a mild type, readily yielding to moderate doses of quinine.

Boldness and prudence are both necessary in order to attain such results as those attained in Italy. In the commencement the daily dose should not exceed $\frac{3}{100}$ grains per diem of arsenious acid for an adult, but the dose must be increased gradually up to five or six times that amount, viz., to $\frac{15}{100}$ or $\frac{18}{100}$ gr. a day in districts where the malaria is very severe, giving the arsenic so that there is never an accumulation of it in the stomach and never upon an empty stomach.

In addition to the prophylactic use of arsenic it is necessary also to have some effective, reliable and inexpensive means of treating malarial diseases, and means which do not injuriously affect the health in other respects. While the acute malarial diseases are generally readily amenable to treatment with the cinchona alkaloids the chronic poisoning is sometimes even aggravated by quinine, and this chronic malarial poisoning is the great curse of malarious countries.

The distinguished professor gives to Dr. Magliori the credit of first calling the attention of the medical profession to a remedy which had long been in common use among the laity of certain malarious districts of Italy. This is a simple decoction of lemon, prepared by cutting up into thin slices a lemon, which is then put into three glassfuls of water and boiled down to one glassful. This is then strained through linen with pressure and the decoction is set

aside to cool and the whole amount is to be drunk fasting. Dr. Mascagne, of Avezzo, tried the remedy in his own person and succeeded in promptly curing an obstinate malarial fever which had resisted the action of quinine.

This use of lemon promises to be a most valuable addition to our resources in the therapeutics of malarial diseases. Some personal observations in this city seem to indicate that the lemon is not less efficient here than in Italy. The taste of the decoction is exceedingly disagreeable but its efficacy is already well demonstrated.

ANEURISM OF BOTH COMMON CAROTIDS—LIGATION AND CURE.

Owing to the anomalies that sometimes present in the circle of Willis, and the important part in its formation taken by the carotid arteries, the ligation of these trunks is surrounded with more danger than of those elsewhere in the arterial system. Cases of softening of an *entire* hemisphere of the brain have been observed, that were due to obliteration of the internal carotid near its bifurcation; so records Charcot in his published lectures upon localization in diseases of the brain. In that most important arterial anastomosis, the communicating arteries may be merely filiform and entirely inadequate to re-establish circulation in case of closure of a main contributing trunk. It has been observed that one carotid gave off the anterior communicating and anterior cerebral of the opposite side as well, a minute channel only uniting it with its proper carotid. In such a case ligature of the main feeder of the hemispheres would most probably have been fatal. In this connection it should be borne in mind that as insisted upon by Charcot and Duret, the arteries supplying the great ganglia at the base of the brain do not anastomose with those of the cortex. Ligature of both carotids evidently is an operation attended with great risk. Dr.

Riegner details (*Centralblatt f. Chir.* No. 26, 1884) such a case, in which the vessels were ligated with an interval between the operations of over a year.

A merchant aged 54, otherwise in good health, excepting hoarseness and difficult swallowing, applied for relief from an aneurism of the left common carotid at the level of the larynx. The operation of ligation resulted in no symptoms on the part of the brain. A year and a half later the patient reappeared with an aneurism about the size of a pigeon's egg on the right carotid. The larynx was pressed over to the left, the patient was very cyanotic, complained of difficult deglutition, felt very weak and was much depressed. Pressure on the carotid over the clavicle could be kept up only a few seconds, as immediately cyanosis, vertigo and darkness of vision resulted.

The patient was placed on his back and an ice bag was kept upon the tumor; thus treated he gradually bore the pressure for five minutes without the brain symptoms. On the fifth day the ligature was applied, pulsation ceased at once in the sac, the pupils were dilated to the maximum, but soon the right became the smaller; threatening facial cyanosis came on, but gradually passed off in twenty minutes. After the patient recovered from the anesthetic he complained of no cerebral disturbance; the pupils became of equal size the same day and the cyanosis disappeared entirely. The next afternoon there was light delirium, and as it passed, some motor paralysis of the left arm, which also disappeared the following day. In eighteen days from time of the operation the case was dismissed cured. Analysis of this history would lead us to suppose that whereas ligation of the left carotid gave rise to no brain disturbance, but momentary pressure upon the right excited serious manifestations of deficient circulation, the right was much more active in supplying the brain than the left, and that collateral circulation had been judiciously established by the treatment adopted preparatory to the final operation of ligation.

MALARIA—ITS CAUSE.

Among the most important to us of the subjects considered at the International Medical Congress was that presented by Prof. Tommasi-Crudeli in his address on "The Natural Production of Malaria and the Means of Making Malarial Countries Healthier."

Having referred to the retarding influence of the paludal theory of the causation of malaria upon any real advancement in the study of its true etiology, he proceeds to call attention to the evidences that some sort of a ferment is the real cause. That malaria is not of paludal origin is evidenced by the fact that it is found in many places where there are no marshes and that many marshy regions are entirely free from malarial influences.

The idea that the ferment consists of living organisms is a very old one and has been maintained by many writers and for many years. Some of the facts which point in this direction are the following, viz., Malaria is produced in soils of the most varied chemical composition, and hence the persistent identity of the product is inexplicable chemically, but is readily conceivable on the hypothesis that it is produced by "an organized ferment which finds the necessary conditions for its life and multiplication in the most varied soils, as is the case with millions of other organisms vastly superior to the rudimentary vegetables which constitute the living ferments."

Another evidence in this direction is the progressive intensity of the morbid production in abandoned malarious districts.

Again, as the Professor remarks, there are peculiarities in the local charging of the atmosphere with malaria which can be explained only in this manner.

A number of different microscopic organisms have been asserted by different observers to be the cause of malaria; but it was in 1879 that Klebs and Tommasi-Crudeli undertook a more thorough and systematic study with the microscope and by means of the cultivation of microscopic vegetations. After much study they feel

themselves to be justified in asserting that the malarial ferment is the *schizomycete bacillus*. He says that MM. Marchiafava and Celli have succeeded in demonstrating that the germs of this schizomycete attack directly the red blood globules, and destroy them, causing them to undergo a series of very characteristic changes.

He believes, then, that while much yet remains to be learned concerning this bacillus and its modes of development and action, it has been demonstrated that there is such an organism which can flourish in a variety of different soils, and without the presence of which malaria is not caused by any marsh or pond of stagnant water.

This organism may live or exist in an inert state even for centuries in the ground unless there be present certain conditions essential for the development of the ferment. Among these conditions which favor the multiplication and dispersion of the ferment through the superjacent atmosphere, there are three absolutely essential for the production of malaria, viz., a temperature continuously above 67.5° F., a moderate degree of humidity of the soil, and the direct action of oxygen of the air upon the strata of the soil which contain the ferment.

MALARIOUS DISTRICTS—TO RECLAIM.

According to the observations of many careful hygienists there are three essential conditions for the multiplication and diffusion of the ferment which causes malaria, viz., a temperature persistently more elevated than 67.5° F., a moderate degree of permanent humidity of the soil, and the direct action of the oxygen of the air upon the strata of the soil which contain the ferment. If at any place by natural or artificial agency one of these conditions is absent or can be removed malaria cannot then be developed.

In his address before the Copenhagen Congress Prof. Tommasi-Crudeli noted that in the course of nature there is a freedom from

malaria in winter weather because the thermic condition is interfered with. During very warm, dry summers there is a freedom from malaria by reason of the hydraulic condition being disturbed; and finally the atmospheric condition is sometimes altered, and malaria in certain districts is sometimes suppressed by the covering of a malarious soil with earth which does not contain the ferment or by the thick growing and close matting together of the roots of grasses in a meadow.

There is no practical method of artificially altering the thermic conditions so as to prevent the development of malaria. Various methods of modifying the hydraulic and atmospheric conditions have been tried. For many centuries different systems of drainage have been used more or less extensively. Opposite views have been held as to the influence of forests, some having held that forests acted as a protection against malaria, others that the clearing of forests conduced to the diminution of malaria by causing free evaporation, and thereby what might be called an upward draining-of the water from the soil. The latter view is held by Prof. Tommasi-Crudeli, and is sustained, he claims, by extensive observation and historical records.

While he does not deny that in certain circumstances groves of eucalyptus or other rapidly growing trees may be beneficial, yet he thinks that very exaggerated claims have been made for them, and thinks that little reliance should be placed upon them as a protection, especially as the eucalyptus tree is not hardy and requires a good deal of care.

In some cases it has been found practicable in Italy to suspend or suppress malaria by combining thorough drainage with an overlaying of the malarious soil with thick layers of uninfected earth, carried there either by the muddy waters of rivers or by the hand of man. Some experiments of this sort in Rome seem to have been quite successful, but of course the range of applicability of such measures is quite limited.

The forced cultivation of malarious districts has sometimes had

the effect of repressing the morbid influences; but it has not been found possible to solve all the problems involved so that we can determine before-hand whether this will succeed or not; and in all cases the immediate effect of forced cultivation, over-turning the soil and exposing it to the atmospheric influences is always to intensify the effect of malaria with disastrous effect upon those engaged in the work.

In order to carry out any system of forced cultivation which taken in connection with drainage or overlaying of the soil gives the best promise of successfully combating the malign influence of malaria, it is necessary that agriculturists be enabled to remain in the region during the malarious season as well as at other times of the year. This can only be effected by increasing the capability of the human organism to resist these attacks of malaria.

URETHRAL POLYPS.

The application of the endoscope enables the surgeon to explore visually the urethra from the glans to the prostatic portion. Such examination has demonstrated the occurrence of polyps in that canal sometimes in considerable numbers. Dr. Rosenthal, in number 23 of the *Berliner Klinische Wochenschrift* details a case examined and treated by himself, in which the urethra throughout its course external to the prostate was thickly beset with polypoid growths; the proximal part being most affected. The size varied from such as projected freely into the diagnostic tube to minute outgrowths as large as a pin head. Their bases also varied; some were broadly rooted, others had slender pedicles. Some were of soft consistency, others fibrous. The growths were successfully scraped out with a sharp-edged spoon made for the purpose; the bleeding was stopped with a cotton tampon and afterwards the scraped spot cauterized with a 50 per cent. nitrate of silver solution. A number of sittings were required for the full extirpation. The urethra was left in a normal condition, no strictures appearing.

The cause of the disease was a pre-existent gonorrhea.

SOCIETY FOR THE PREVENTION OF CRUELTY TO
ANIMALS.

It gives us great pleasure to note the growing usefulness and prosperity of this Society, whose aim appeals so directly to the sympathy of all right-thinking people. Its methods are so wise and moderate as to give no offense to the most conservative, and yet the steady advance in the number of successful prosecutions, and the still more rapid education of public sentiment, to the point where offenses against animals are promptly remedied upon suggestion without threat of arrest, show that this organization is by no means "resting upon its oars," but making good headway against too prevalent ignorance and brutality. The progress made in practical results, beside that accomplished in arousing public sentiment, is detailed in a description of the erection of drinking fountains, the advance made in compelling street-railway associations, slaughterers of stock and transportation companies to show toward the animals in their control that consideration so necessary for their well-being and usefulness as well as comfort.

There are a thousand ways where the evil consequences of abuse or neglect of stock reacts on human beings, and the Society has done wisely in bringing these features prominently before the public. Many a man of influence is not tender enough in heart nor sensitive enough in imagination to be much, if at all, impressed by a portrayal of the sufferings of a Texas steer in transitu across the country, or the slow, distressing decay of swill-fed cattle in stables reeking with filth and prolific in bacilli tuberculosis; but let this man find himself restricted to tasteless roasts, dangerous to health, or once make it plain to him that the baby of the house is in peril from poisoned milk, and he immediately becomes an enthusiastic supporter of the measures proposed by the Society looking toward the abolition of customs so barbarous as to render these dangers possible.

Congress has enacted a law to protect animals during transpor-

tation, requiring that they shall have five hour's rest after every twenty-eight of confinement in the cars, this interval to be spent in some place where they can move about and be comfortably watered and fed. But to enforce this law inspectors are required who shall be constantly on duty; as yet the funds of the Association are inadequate to more than make a beginning toward this, and it is evident, according to statistics, that little will be effected by the selfish interest of owners since the loss per head of 64 pounds on each individual of 27 carloads of cattle between Chicago and New York, has not been able to rouse their cupidity enough for them to apply the only effective remedy. Where men do not even respond to financial losses we may be pretty sure they will not correct the abuses which cause them unless compelled to by form of law.

THEORY OF INTERMITTENT FEVER

At the Copenhagen Medical Congress Dr. J. L. Jensen presented a paper upon the causation of intermittent fever.

He believes that these fevers are produced by microbes which develop well at the normal temperature of the body, but cannot endure for any considerable length of time a temperature much elevated above the normal, that in man, for example, these microbes perish at a temperature of 105° to 107.5° F.

When the microbes are multiplied to a certain number, they give rise quite suddenly to the reaction which is called fever. The elevated temperature destroys the microbes almost totally and the fever ceases because its cause is previously removed.

When the fever has ceased, the temperature falls and becomes normal. Some few individuals of the microbes, more refractory than the mass to the influence of heat, have survived the fever; these commence to multiply and at the end of a certain lapse of time their number is so great as to provoke a new attack of fever, which

in its turn is arrested, when, with the exception of a few, the microbes succumb to the high temperature.

So the fever goes on in periods of repose and activity which are almost uniform in duration because the medium is the same and the normal temperature as well as the febrile temperature does not vary much during the periods.



AMERICAN OPHTHALMOLOGICAL SOCIETY.—This society of specialists held its twentieth annual meeting at the Grand Hotel, Catskill Mountains July 16 and 17, 1884. A number of interesting papers were read and discussed, and some remarkable cases were reported.

The following are the officers elected for the ensuing year: President, Dr. W. F. Norris, of Philadelphia; Vice President, Dr. Hasket Derby, of Boston; Secretary and Treasurer, Dr. O. F. Wadsworth, of Boston; Corresponding Secretary, Dr. J. S. Prout, of Brooklyn; Committee on Publication, Drs. O. F. Wadsworth, Hasket Derby and G. Hay; Committee on Membership, Drs. Jno. Green, Geo. C. Harlan, A. Mathewson, Samuel Theobald, J. J. B. Vermyne.

The meeting adjourned till the third Wednesday of July, 1885, the place of meeting being left to the decision of the Secretary.

AMERICAN OTOLOGICAL SOCIETY.—The seventeenth annual meeting of the American Otological Society was held at the Grand Hotel, Catskill mountains, July 15, 1884. Twenty-three members were in attendance and three new members were elected. The time of the sessions was fully occupied with the reading and discussion of papers.

The following officers were elected for the ensuing year: President, Dr. Charles H. Burnett, of Philadelphia; Vice President, Dr. J. S. Prout, of Brooklyn; Secretary and Treasurer, Dr. J. J. B. Vermyne, of New Bedford; Committee on Publication, Drs. J. J. B. Vermyne, C. J. Blake and J. O. Green; Committee on Membership, Drs. Jno. Green, H. G. Miller and H. D. Noyes.

The next meeting will be held at the same place as that of the American Ophthalmological Society, and on the day preceding that.

BOOK REVIEWS AND NOTICES

ELEMENTARY PRINCIPLES OF ELECTRO-THERAPEUTICS. By C. M. Haynes, M. D. 8vo.; pp. 426; 135 illustrations; cloth \$2. Published by the McIntosh Galvanic and Faradic Battery Co. Chicago, Ill., 1884.

This book is evidently written by order and in the interest of the Galvanic and Faradic Battery Co., of Chicago, Ill., and reminds one of the railroad charts published in this country by the railroad companies, in which only the road of the respective company is represented as the direct route while the competing roads are neglected as far as possible even at the sacrifice of a little physical geography. While the business enterprise of the company deserves all praise and the book may be of service to those using its instruments, it can hardly be expected to contain many original investigations or any marked advance in the science of electro-therapeutics. The text contains much that is interesting, but seems to be arranged more for the purpose of describing in turn the instruments manufactured by the Mc I. G. and F. Battery Co., than for a consistent elucidation of the subject. As so much attention is given to the instruments we deem it not unfair to speak of some of these. By the adoption of hard rubber and nickel-plated metal as the principal materials used, these all present an elegant appearance; some of them, as the electric chair and bath arrangement, look quite formidable and expensive. But where serviceability, endurance, and facility of reparation is looked for more than an impression on the awe-stricken patient, other apparatus might suit better. The above named cumbrous and expensive apparatus in its very construction disregards the first principle of electro-therapeutics, viz: "To treat *in loco morbi*." The galvanometer described indicates only the fact that a current is flowing and its direction, while there are galvanometers manufactured which being empirically graded according to the recently adopted (Paris, 1882) unit of electricity, the ampere, into milli-amperes enable one to tell at the same time the quantity of the current. Some of the instruments pictured on page 266 and 267 are

actually cruel, if applied with their bare points as described in the text. The same is true of Duchenne's points which are obsolete. The author apparently has no great experience as an electro-therapist, as he displays little discretion in copying from the list of good and indifferent authors consulted. He has a natural tendency to still enlarge the domain of electro-therapeutics, which can only end in disappointment to those following his advice. From page 301 to the end of the book the text is taken up with the electric treatment of diseases of the nose, throat, heart, lungs, digestive and urinary organs and miscellaneous diseases in the treatment of which electro-therapeutics occupies a subordinate role. Galvano-cautery is not properly a branch of electro-therapeutics, as it acts purely by the heat produced. Diseases of the nerves and muscles, in the treatment of which electricity is of pre-eminent service, are not even mentioned in the table of contents and only currently alluded to in the text. The book seems to be written more for the public than for physicians. A vocabulary in the beginning of the book is very good. The style of the writer is pleasing, and the print, illustrations and binding first-class. H. W. H.

BACTERIA AND THE GERM THEORY OF DISEASE. Eight lectures delivered at the Chicago Medical College. by Dr. H. Gradle, Prof. of Physiology, etc. *Chicago: W. T. Keener.* 1883. 8vo.; pp. 219. cloth.

These lectures of Prof. Gradle's constitute a very admirable résumé of the present status of the germ theory and present a clear and distinct statement of what has been definitely established by different observers with reference to the presence and influence of bacteria in different diseases. At the same time the lecturer criticizes judiciously the work of a good many who give evidence of inaccuracy of method or of hasty and inconsiderate conclusions. We take pleasure in expressing hearty commendation of these lectures.

INSANITY AS A DEFENSE TO CRIME. By JOHN D. LAWSON. *St. Louis: F. H. Thomas & Co.* 1884. 8vo.; pp. 1001; sheep; \$6.

"The design of this work is to present *every reported case* where insanity has been set up in defense of a criminal charge, and has been passed upon by a court of justice in America or Great Britain. If the case turn wholly on the topic of insanity then the case is given in full. If there were other questions involved then only that part relating to insanity is given." This we quote from the publisher's announcement. The scope of the work as so announced

is not such as to make it a book that the rank and file of the members of our profession will need to have in their libraries; but those who are studying the special features of insanity as it is viewed by the law, and those who are interested in or concerned with medical jurisprudence can find in this one volume the decisions for which otherwise they must search through many.

There is much interest as well as profit in the study of these questions, and in considering the different rulings made by eminent justices in different states in regard to the various issues that have been raised in the presentation of the claim of insanity as a defense against punishment for alleged crime.

Of course it would be entirely out of place here to enter into any criticism or review of these rulings. This work simply brings them together here as they were given in reports of different cases.

The six chapters divide these rulings under the following headings, viz.: The Legal Test of Insanity, The Burden of Proof of Insanity, Drunkenness, Kleptomania and Somnambulism, Evidence and Practice, Insanity after Trial or after Conviction.

The author has done his work well both in compiling and arranging the cases and in annotating the several chapters.

The publishers have presented the volume in excellent form. We have noted some few verbal and literal inaccuracies, but none that are calculated to mislead except, perhaps, that on page 77, line 5, in which the word "nowhere" should read "not here."

PROCEEDINGS OF THE NINTH ANNUAL SESSION OF THE SOUTHERN ILLINOIS MEDICAL ASSOCIATION held at Du Quoin, Ill., June 19 and 20, 1884. Reported phonographically by Jno. B. Rosson, M. D., Vergennes, Ill. 8vo.; pp. 34; paper.

This little pamphlet is a creditable report of the last meeting of this active working society. It is a decided improvement upon the last one, evidencing much greater care in the preparation and publication.

SECOND ANNUAL REPORT OF THE PROVINCIAL BOARD OF HEALTH OF ONTARIO being for the year 1883. Printed by order of the Legislative Assembly. 8vo.; pp. 430; paper.

This volume is a valuable contribution to the subject of sanitary science. It is by the accumulation of careful studies such as those in some of these papers that after a time we shall be able to evolve more definite principles than have yet been established. The Board of Health of Ontario are doing a good work, and their report does them credit.

BOOKS AND PAMPHLETS RECEIVED.

Proceedings, Addresses and Discussions of the Third Semi-Annual Meeting of the Kentucky State Sanitary Council, held at Bardstown, Ky., March 26-27, 1884, under the auspices of the State Board of Health. —Phthisis Pulmonalis, etc. By L. H. Wood, M. D. Denver. Col. (Reprint from the Denver Medical Times.)—Transactions of the Mississippi State Medical Association, West Point, April 1884.—Proceedings of the Ninth Annual Session of the Southern Illinois Medical Association held at DuQuoin, Ill., June, 1884.—Proceedings of the Naval Medical Society, Washington, D. C.—The Treatment of Diabetes Mellitus. By Austin Flint, Jr., M. D. (Reprint from the Journal of the American Medical Association.)—Proceedings of the Missouri State Board of Health at its Semi-annual Meeting in St. Louis, July 8-10, 1884, together with the Report of the Secretary.—Annual Catalogue of the Louisville Medical College, Louisville, Ky. Session of 1884-'85.—Proceedings of the Sixth Annual Meeting of the Missouri State Pharmaceutical Association, held at Brownsville, June 10-11, 1884.—Gun-shot Wounds of the Small Intestines. By Charles T. Parkes, M. D. Chicago: Cowdrey, Clark & Co.; 8vo.; pp. 67; paper.—The Theory and Practice of Medicine. By Frederick T. Roberts, M. D., B. Sc., F. R. C. P. Fifth American Edition, with Illustrations. Philadelphia, 1884: P. Blakiston, Son & Co.; 8vo.; pp. 1008; cloth \$5; full leather and raised bands, \$6. (J. H. Chambers & Co.)—Diseases of the Throat and Nose, etc. By Morell Mackenzie, M. D., London. Vol. I. Oesophagus, Nose and Naso-Pharynx. Illustrated. Philadelphia: P. Blakiston, Son & Co., 1884. 8vo.; pp. 550; cloth \$3; leather \$4. (J. H. Chambers & Co.)—Materia Medica and Therapeutics. By J. Mitchell Bruce, M. A., Abern., M. D., London. Philadelphia: Henry C. Lea's Son & Co., 1884. 8vo.; pp. 547; cloth.—Speech of Hon. John J. O'Neill, of Missouri, in the House of Representatives, on the "Improvement of the Mississippi."—Public Health Laws of Illinois and Sanitary Memoranda.—The Medical Graduate and his Needs. By George C. Wellner, M. D., 1884. 12mo.; pp. 100; cloth. Detroit, Mich.: Geo. S. Davis.

REMARKABLE FECUNDITY.—PROF. WM. F. WAUGH reports the case of a patient of his who has borne seven living children in the space of thirty-two months. September 4, 1878, she bore triplets, a boy who died in seven weeks, and two girls, still living and well, though small for their age. In February, 1880, she had twin girls, both of whom died within four months. May 22, 1881, she bore twins again, who both died of whooping-cough when five months old. She had previously borne a single child and twins at intervals of about three years before the birth of the triplets.—*Med. and Surg. Reporter*, July 26, '84.

REPORTS ON PROGRESS.

SURGERY.

Hamamelis for Varicose Veins.—DR. B. F. NICHOLS reports four successful cases of treatment of varicose veins by the administration of fluid extract of hamamelis. The patients were three women and one man. One of the women was relieved of suffering from varicose veins during two successive pregnancies. One of them suffered intensely from ulceration of the legs from the knees to the ankles due to a varicose condition of the veins. Under the local and internal use of the drug the ulcers healed and the woman was entirely relieved.—*Phil. Med. Times*, August 23, 1884.

Hyperidrosis.—DR. GEO. H. FOX says that in the treatment of this annoying condition we should seek to remove the predisposing causes if possible, to control nervous derangement and regulate the circulation. The drugs that have been most highly recommended are atropia and ergot. Small doses of jaborandi have been found serviceable, both in local and general hyperidrosis. Among local applications, baths containing sea-salt or carbolic acid have been found valuable, or a one per cent. solution of sulphate of quinine in alcohol. A powder consisting of the following ingredients is recommended in hyperidrosis of the axilla or genital region:

R	Salicylic acid,	-	-	-	-	-	3 parts.
	Starch,	-	-	-	-	-	10 parts
	Talc powder,	-	-	-	-	-	100 parts.

To be applied after bathing with a strong solution of tannin or alum, and carefully drying. Sub-nitrate of bismuth may be rubbed upon the hands or feet, when they are the site of excessive sweating. Hebra's plan of treatment is to apply diachylon ointment continuously for a week or two, renewing the application twice daily.—*Phil. Med. Times*, August 23, 1884.

Indigenous Leprosy.—DR. W. H. GEDDINGS gives an account of another case of indigenous leprosy which he has observed in South Carolina. The patient is a young woman, twenty years old, of English descent. The disease first developed at the age of ten years, by the appearance of a white anesthetic spot on the right leg immediately below the knee. Similar anesthetic maculæ appeared upon different parts during the first year. During the following year patches of a dirty yellowish or brownish color, indurated but not anesthetic, made their appearance. In February, 1882, hemispherical tubercles about as large as split peas appeared upon the face. The patient has now the characteristic appearances of well developed leprosy.

Dr. Geddings states that this is the twentieth case of which he has had personal knowledge in Charleston and its vicinity during the last twenty-five years. The disease has occurred with greater frequency among the whites than among the blacks or Indians, though neither of these races is exempt. He thinks that in this country it is not contagious, and that there is little ground to believe that the disease will ever become endemic here.—*N. Y. Med. Record*, August 16, 1884.

Almost a Laparotomy.—B. W. STONE reports a case which occurred several years ago.

A German woman, 35 years old, ignorant and totally unacquainted with the English language, was transferred from the county almshouse to a metropolitan hospital to be treated for abdominal dropsy. Having been five weeks in the almshouse, she had been tapped at a point about one inch below the umbilicus, and about five gallons of fluid had been drawn off. She had borne three children and had miscarried twice, once at the third and again at the fifth month. Her youngest child was seventeen months old.

She had been much exposed during the preceding winter, and had suffered from a bronchial catarrh. Her abdominal trouble was of six months standing, commencing with sharp pain in the back and side, continuing for a week, when enlargement became apparent, and rapidly increased. During the first two months nausea and vomiting were quite marked symptoms.

On admission to the hospital she was cursorily examined by a well-informed physician, but young in practice, who pronounced it a case of simple ascites. Two other physicians, of larger experi-

ence, on making a more thorough examination, detected a large tumor, which had escaped the notice of the first one. The tumor seemed to originate in the left side of the pelvis and to extend to within an inch and a half of the umbilicus. Influenced by the account of the tapping in the case to exclude ascites, they pronounced the case one of left ovarian dropsy. One week later the case passed into the ward of a distinguished professor of surgery for operation. He examined by palpation and with sound and speculum and confirmed the diagnosis, as did also an eminent and experienced physician who examined her thoroughly the next day. A few minutes after this last examination a large clot of blood was expelled by a slight bearing-down pain, but a mild opiate soon removed all suspicious symptoms. The day for the operation was set at five days after this last examination, and on the day following the examination the professor gave a clinical lecture to the class upon ovarian disease, dwelling especially upon differential diagnosis. An obstetrician was called in on the afternoon of the day before that set for the operation. He heard the history of the case and an account of the previous examinations and then proceeded to make a careful examination himself.

The sound passed five and a half inches into the cavity. He diagnosed two tumors; one, the large, subinvolted uterus, the other, of doubtful character, but lying close to the womb, probably a cystic tumor of the broad ligament, or mesentery.

The sound was covered with blood, and pains came on soon after its withdrawal, and soon became quite severe, and in fifteen minutes the patient passed *per vaginam* three pints of blood and water. Ten grains of Dover's powder were administered, and ice was introduced into the vagina, which apparently arrested the hemorrhage.

At half past eight o'clock P. M., the patient gave birth to a six and one-half months' fetus, which lived till six o'clock the following morning. Instead of operating, the professor lectured to the class again upon the diagnosis of ovarian tumors.—*American Practitioner*, August, 1884.

Vesical Calculus Voided by the Rectum.—J. F. McELROY states that a colored boy, fifteen years old, had suffered for several years with symptoms of stone in the bladder, but his urethra was so sensitive as to make it impossible to pass a sound. The doctor put him upon treatment preparatory to operation. A week later, while

at stool, he passed, *per rectum*, a mulberry-colored calculus, two inches long and nearly an inch in its short diameter, and weighing a little less than an ounce. Rectal examination showed the opening from the bladder by which the stone had passed through into the gut. The patient improved rapidly and was well in three months. When erect, the urine passed naturally by the urethra; when recumbent, it came by the rectum.

The patient having died a year later of malarial fever, a post-mortem examination revealed an opening between the bladder and rectum large enough to pass the finger into. The walls of the bladder were thickened and the mucous membrane of the rectum was much congested.—*American Practitioner*, August, 1884.

Resection of Pylorus—Gastrostomy.—BILLROTH made his fourteenth resection of the pylorus in the latter part of July. In Prof. Albert's clinic gastrostomy has been performed over thirty times for carcinoma of the esophagus and cardiac orifice.—*N. Y. Med. Journal*, August 23, 1884.

CLEAN HOMES AND PURE LIVES.—It is, however, to continue the subject, true that moulds and moisture are sources of disease and decay, and that their increased growth may be prevented, and must be, if we would have healthy homes. It is true, also, that mental disturbances come from moral and physical disturbances. In the one case, to secure the healthy home, the dark, damp, mouldy places of the homestead can be got rid of by a simple process of fumigation with sulphur, and by the same process, at times, decomposition and putrefaction may be prevented. Certainly as much as this can be said of the proper treatment of the human body. These two texts in Holy writ: "Know ye not that your bodies are the members of Christ?" and "Know ye not that your body is the temple of the Holy Ghost?" are as much sermons for a healthy body as for a moral life, and if the pulpit and the schools, the press and the forum, would more frequently illustrate these texts to those whom they instruct and teach, there would be far more physical education and improvement, and the schools would be far advanced from what they are at the present time.—*Reports and Papers of Am. Pub. Health Association*, Vol. VIII, p. 25.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, May 27, 1884.

ASPERGILLUS.

Dr. Spencer presented some specimens of aspergillus from the ear which had been prepared by Dr. M. D. Jones.

Dr. Todd.—I think that one who is not in the habit of looking for such things might easily overlook these growths. However, the general practitioner may recognize the presence of aspergillus on account of the very obstinate character of the disease and the absolute certainty of recurrence unless the case is kept under supervision. The general practitioner had better make use of the microscope where he suspects the presence of fungi. Of course, the appearances are very distinct for those who are familiar with them. In the case of aspergillus flavescens we sometime see the entire auditory canal powdered as though with flowers of sulphur.

Dr. Spencer.—The symptoms are very intense itching, and it is with difficulty sometimes that the mass is detached. It is almost always firmly adherent to the wall, and the surface exposed by detaching the mass is very much reddened; it does not bleed readily, however: sometimes it requires the use of the forceps, or of the curette to detach the mass.

Dr. Todd.—I should like to ask the doctor his opinion as to the occurrence of aspergillus, whether the presence of the fungus may be regarded as a primary condition, or there may be a preparatory condition for the fungus growth; that is, may it be produced by some existing disease?

Dr. Spencer.—I think the condition essential to the growth and propagation of this fungus is primarily that of moisture; and it very frequently arises I think in ears that have been treated, possibly for eczema or some irritative condition of the parts, in ears that

have been self-treated, where the patient has been pouring oil in the ear, or has been using drops of one kind and another. I am not sure, so far as my observation extends, that we ever have aspergillus without some such history as that.

Dr. Homan read a paper entitled "Notes on a case of gouty prostatitis (vid p. 316).

EXSECTION OF INTESTINE.

Dr. Grindon made a preliminary report of a case of exsection of intestine (for full report vid p. 320).

Dr. Tuholske.—Mr. Chairman, the doctor is undoubtedly to be congratulated on this case. It is very seldom we are so successful as he has been under the difficulties and with the complications of pregnancy. The removal of a section of intestine that has been injured in that way according to our modern ideas and in the present status of surgery is the thing to be done. Some time ago it was the rule to inclose the injured piece of bowel in the opening, allow adhesions to take place and afterwards make an artificial anus; but at present the rule is to excise the injured portion. We have a case on record of some gentleman in Chicago removing two feet and a half of intestine, I believe, and the patient recovered. I don't know that we have been so fortunate where there was a total absence of antiseptic management and only this absolute cleanliness which was adopted as in the case of Dr. Grindon; he must certainly have managed to keep that patient absolutely clean and the abdominal cavity absolutely clean, otherwise no such result would have followed. Undoubtedly in this case exsection of the bowel was the thing to do. It is very seldom that one is able to close an opening in the bowel unless it be a very small one. A ligature may be thrown around the part if it is no more than a puncture. I would like to ask the doctor how that injury was produced in the bowel; was it simply a cut through the abdominal parietes, producing three wounds?

Dr. Grindon.—Of course that I cannot be certain about. My idea of the case is this: it was done as I said with a blunt instrument, an ordinary pocket knife. The man drew it out of his pocket and opened it, the woman stated, and from the appearance of the wounds both externally and internally I suppose the knife to have been blunt and that considerable force was used. There were three tears or incisions into the gut. The three were close together. My idea

was that probably the knife went in at the place where we found the greatest incision and tore the surface on the other side and then penetrated through that, because from the history of the case and the general appearance I think it likely that the thing was done with one cut. In regard to what the doctor said about cleanliness in the case, I will say that it was particularly easy in this case to use perfect cleanliness, as the opening through the abdominal parietes was so small that it constricted the gut at that point, and the intestinal contents, the blood, etc., and the dirt from the floor of the room and everything else that covered the surface of the intestine had no chance to return into the abdominal cavity. These folds were cleansed thoroughly before they were returned, and the opening was not large enough to permit of the entrance of foreign substances. If the opening had been larger, so as to allow of the return of the matters into the abdominal cavity, the result might have been different.

OVARIOTOMY—IODOFORM.

Dr. Tuholske.—I have a specimen to present which is not a very rare one; it is an ovarian polycyst that I removed about twelve days ago. I will report the case because of some difficulty attending the operation and the extensive use of iodoform following it. The patient was a young woman 24 years of living in Southwest Missouri. Her attention was first directed to a swelling in her left side; the pain which she experienced after a rough ride in attending a picnic directed her attention to the swelling. Applying to a physician in the neighborhood, he examined her and made a diagnosis of an enlarged spleen due to malaria, for which the patient was treated for some time; the swelling however kept increasing. The patient up to this time had been fairly regular in her menstruation and had been apparently in good health. As her abdomen got larger, her menstruation became irregular at first and then stopped altogether, and the enlargement became painful. She applied again to some physician living in the neighborhood, and was fortunate enough to find one who recognized the nature of the disease even at that early stage, something like six months ago, but couldn't prevail upon her to submit to any operation. Until comparatively lately she had been fairly comfortable, but about three months ago the enlargement became so annoying that she put herself under the care of Dr. A. J. Watts and Dr. Hackney. They diagnosed an ovarian cyst. For the purpose of diagnosis and probably thinking to relieve her, they tapped

her and removed from the cyst a large quantity of thick yellowish fluid that looked like pus, without, however, appreciably diminishing the size of the tumor. The size of her abdomen ceased soon after to increase. This tapping was not followed by any reaction or inflammatory trouble at all, the patient in a few days being as well as ever. Some four weeks ago the enlargement became very prominent near the umbilicus, and she was again tapped and a small amount of fluid removed, again producing no disturbance, no reaction. Three weeks ago she determined to be operated on, and the doctor telegraphed for me to come. I found this woman in pretty fair health, but living up in the mountains, hard to reach, twelve miles from a drug store and away off from a doctor, where there were no nurses about her, no one but her mother. When I had heard of all that I had suggested that she be brought into town, but the doctor wrote that she would not be able to stand the trip of twenty-five miles which she would have to go in a buggy; and after I rode over those twenty-five miles I became convinced that an invalid would not have been able to make that trip. I examined her, and the diagnosis made by me corroborated that of both the other gentlemen in attendance. No doubt at all occurred to my mind as to the nature of the case. I suggested an operation at once and proceeded to do it at that very hour.

The operation was performed in a log cabin which had no windows. There was a front door and a back door, and whenever they wanted light they opened the door. We constructed a table and as fortunately the weather was fairly warm, we placed it in the open doorway so that we would have light, for in the house there was none except what could be gotten by a candle. She was put under the influence of ether. A good deal of vomiting occurred during the time of the operation, on account of her having eaten a hearty meal shortly before. My assistants were Dr. Hackney and Dr. Watt, whose patient she was, and an under-graduate whom I met on the road and who recognized me as coming from the Missouri School. I opened the abdominal cavity and encountered the cyst without much difficulty. I found the cyst to consist of a great deal of solid matter; the points where the tapping had been done were closely adherent to the parietal peritoneum and omentum, which was stretched over the whole anterior part of it. There was in no part of the cyst enough fluid to make a large trocar of any use, so here and there I put in a knife, allowing a certain amount of fluid to es-

cape, and raised the omentum that had grown with its margin to the surface of the tumor. This occasioned considerable bleeding. I found the incision that I had made about four inches long, would not be sufficient to deliver the tumor, and it was impossible to reduce the tumor in size any further, hence I enlarged the incision and proceeded to raise the tumor out of the cavity. It ruptured in places and some of the contents of the cyst escaped into the abdominal cavity. Whenever we applied the forceps, wherever the teeth were applied the fluid escaped; a slight touch of the cyst would cause it to give way, especially at the anterior portion; and I had to deliver it bodily without emptying it; I did so hurriedly and was fortunate enough to find a slender pedicle, and after the deliver of the tumor the application of the ligature to the pedicle was a very easy matter. The abdominal cavity was now filled with this fluid; there was some pus there and there was a good deal of bleeding from the omentum. I first removed the fluid from the abdominal cavity, then addressed myself to the arrest of the hemorrhage. We know that we are sometimes unable to arrest the bleeding without a great deal of difficulty, and the quickest and easiest way to arrest it in this case was to remove all that bleeding part of the omentum that had been adherent to the cyst. I ligated the vessels and cut off rather more than half the omentum. For ligatures I used heavy silk. I had intended to use catgut ligatures, but unfortunately allowing them to drop on the floor, and not being able to clean them, I had to use the silk. I had a mixture of iodoform and glycerine and heated it somewhat and put the silk ligatures into it until they were thoroughly soaked. I threw a silk ligature around the omentum, tying and cutting it off short. I also put a ligature through the pedicle, and after cleansing it I rubbed iodoform into its free margins, around the openings which I had made for introducing the ligature into the pedicle, thoroughly into the cut ends of the omentum, into every part that had been exposed. I applied it to the inner aspect of the abdominal parietes, and dropped a good quantity, probably a dram, into the cul-de-sac of Douglas where we expect the fluids, or a greater part of them, to collect. I then brought the walls of the abdomen in apposition with heavy silk ligatures treated in the way I have mentioned. and applying the iodoform to the outer surface, rubbing it thoroughly into the cut margins; into the wound where the sutures were applied until I felt satisfied that I had thoroughly protected the parts. After the dressing was completed the patient was put to bed.

the operation having occupied forty-five minutes. She reacted very well indeed. Dr. Watts went back the next day to empty the bladder and take some ice with him and perhaps a little brandy or something of that sort, as nothing could be gotten in the neighborhood.

I thought the prospects were rather gloomy when I left there. I have just now received word that she is doing very well; she has not been sick during the whole course of the reparative process, the temperature never reaching 101°. I consider that a very fortunate case, taking into consideration the difficulties which I met in the removal of the omentum, the escape of the fluid into the abdominal cavity.

This is the cyst that I removed and you can readily recognize here a great number of small compartments filled with fluid; a great many have been emptied since, still it is almost a solid mass. It was utterly impossible to empty the various compartments before delivering or removing the tumor out of the cavity, and the escape of fluid into the abdominal cavity made the case a very ugly one, I think. After what Dr. Grindon has done I will be more careful how much I prescribe iodoform; still without iodoform I should really feel very shaky in a case of that sort. I should feel shaky about the result were I to simply cleanse the parts, even though I were to observe absolute cleanliness, so far as we can imagine it possible to have the parts clean, surgically clean. I think in these cases it is always safer to apply iodoform or some other antiseptic. If we have an antiseptic that can produce no harm, that does not produce any harm when properly applied, then there is no reason why we should deprive ourselves, and still more our patients, of an additional safeguard.

Dr. Schenck.—I have no doubt that very often in bringing patients to the city and taking them to a hospital to be operated upon, we actually do them an injury. I think that the surroundings of the patient should be the most favorable. It is not so much the after-attendance of the physician after the operation is performed as it is the locality where the operation is performed, and oftentimes that which he looks upon as a favorable point may really be unfavorable. I notice that at the Womans' Hospital in New York they have a building for performing ovariectomy entirely separate from the other wards; and I think that the day is rapidly coming when it will be considered almost criminal to perform ovariectomy in a general hos-

pital. I do not know of any one who has had good success as a rule as an ovariologist who has used a general hospital for his operations. Almost all the prominent ovariologists who have had any success at all are those who have separate buildings put up at some place where they are free from any influence of hospitalism. I think that probably the surroundings which the doctor looks upon as rather unfavorable were probably really favorable; that the elevation and free atmosphere produced a beneficial effect, and then the patient probably had the benefit after the operation of not being frequently interfered with. It is sometimes more beneficial for the surgeon to stay away after performing the operation than if he should make regular visits and manipulate the patient.

Dr. Tuholske.—I would like to say to Dr. Schenck that I did not object to free air, that was good enough; but it was about four o'clock in the afternoon that the operation was performed, and, as I have said, there were no windows in this house and it was necessary to operate in the door-way, and during the operation the air became somewhat cool so that it was necessary to hurry a great deal.

Dr. Scott.—Another point Dr. Schenck refers to which I think is most excellent is that these operations should not be performed in a hospital. I think it would be better if they were performed at the patient's home rather than in a hospital. Persons coming from the country to the city come here with very bad ideas of hospitals; they come with depressed feelings; they have a feeling that is very detrimental to recovery; they look upon hospitals as being next door to the charnel-house. An operation has been reported here in a case far more difficult than ovariectomy, a very fearful operation as we are disposed to regard it, and an operation performed in the back-woods, without any of the after-refinements or super-refinements of surgery which we are in the habit of giving our patients, has been entirely satisfactory. This tends to prove that ovariectomy is not a formidable operation. But I think that it is a mistake to bring a patient to the city and put her in a strange hospital, surrounding her by strange nurses and medical attendants, while in the country the operation may be performed out of doors; such an operation has proven successful in this case. If it were not for the case which has already been reported by Dr. Grindon we might be disposed to think that the result in Dr. Tuholske's case was dependent upon the use of antiseptic treatment, but here we have a much more formidable operation, and a much more dangerous operation made

by Dr. Grindon than the one performed by Dr. Tuholske; a case in which he used simply cold water and silk ligatures with no other antiseptic treatment, and the patient recovered. Here are two cases, one treated antiseptically, the other without a particle of antiseptics and both of them result favorably, it is not certainly very much of an argument in favor of antiseptic treatment.

Dr. Todd.—I think we have to take into consideration the fact that Dr. Grindon's patient was a negress whose health was previously perfect, and also the fact that the woman had previously borne children.

Dr. Scott.—I think there is nothing in that, because the woman was in the fourth month of pregnancy. Then negroes are proverbially more easily depressed than white people. I venture to say that this woman was almost frightened to death at the formidable position she found herself in. As a rule negroes are poor patients; they have no vim, no vitality such as we have in the Caucasian race, and nine out of ten have more or less of the scrofulous diathesis.

Dr. Mudd.—There is one question which arises to my mind in connection with the case as to the amount of injury done the patient by the escape of fluid into the cavity. I know that it is supposed to be a source of trouble; I know that it has been a bugbear with surgeons and is I believe a source of danger. Now I am not familiar with any statistics on this subject as to the influence which this escape of fluid exerts. I have seen the accident occur in two cases. In both of them the abdomen was flooded with the contents of the tumor; both tumors were large, adherent and both thin-walled; in each the blood escaped into the cavity; in one the cavity was washed out very thoroughly under antiseptic precautions, and the woman recovered from the shock of the operation and lived three weeks and died from peritonitis. In the other case the woman was somewhat feeble and had a very large tumor and the fluid also escaped into the cavity; this was not washed thoroughly, simply sponged out and without antiseptic precautions, without the use of the spray or carbolic acid, and the woman recovered. I would like to know if the gentlemen know of any statistics bearing upon this point?

Dr. Tuholske.—I don't know of any, I can't answer that; but my general impression has been that when the contents of the cyst escape into the peritoneal cavity you have a very disagreeable state

of affairs, that is about all I know of it. In regard to Dr. Scott's statement, I can bear him out in regard to the fact of removing some patients to the hospital. I operated about six weeks ago, or at least I assisted Dr. Maughs to operate on a patient who came from Springfield to be operated upon for ovarian tumor. She was taken to St. John's Hospital, and when she learned that some woman, who had been operated on for ovarian tumor had died in the same room, and that there was in the next room a woman who had died there after being operated upon for strangulated hernia, she got scared to death almost, she was lying there trembling and weak and begged to be allowed to go home. If this woman had been operated upon at the time I feel certain she would have died before the operation was completed. She went home. We were sent for a couple of weeks afterwards; Dr. Maughs and myself operated in that case and that woman was not a good subject at all; she had been subject to chronic dyspepsia and bronchitis and this ovarian tumor. The omentum was closely adherent and still with the same management that woman made a magnificent recovery and is well to-day. I will say of course I can claim no exceptional skill as an ovariologist but since January I have had four cases in which I have operated, and not one of them has had much fever; they have all gotten well.

RUPTURE OF THE BLADDER.

Dr. Dean.—I have a specimen, Mr. Chairman, and although I have exhibited it elsewhere I think it is of sufficient importance and interest to bear repetition here. The patient was 64 years of age, single, a night-watchman; was admitted to the hospital on the 10th inst. for stricture of the urethra and gastric trouble. He said he had complained about a week and his bowels had not moved during that time. The first symptoms, so far as he was aware, were pain in the inguinal region and upper part of the abdomen, loss of appetite and, for the past three days, vomiting more or less. At the time he entered the abdomen was dense, tympanitic, tender to sudden pressure; he said he had had stricture and trouble with the bladder for twenty-five years, and had used the catheter during this time, but that he was passing water now as was about normal for him; that he was passing his urine regularly and quite frequently, and that he was all right in that respect; he had no fever so far as his own account went. We gave him sulphate of magnesia, and he

had three or four copious actions of the bowels; he still continued vomiting, and the irritability of the stomach remained; he could retain no food but milk with a little water. On the evening of the 13th my assistant called me to see the patient, who complained that he had not passed water during the day. The assistant had tried to pass a soft rubber catheter and was unable to do so; he then tried a filiform bougie and succeeded in introducing that, and passed over it a Gouley's grooved catheter-staff of the smallest size which entered the bladder, and he got a small quantity of urine and then it ceased except to dribble. He passed the catheter again and got a small quantity of urine and then the dribbling, but the catheter could not be depressed. I tried and did not succeed in introducing the catheter. I then tried the filiform bougie and afterwards introduced the grooved catheter over it and obtained about half-a-gill of urine and soon after the urine came in drops. I tried this three or four times with the same result, the bladder being contracted, the filiform bending over and returning upon itself and the catheter not depressing at the outer end. I found also that the anterior portion of the abdomen was tympanitic, and that the respective areas of tympanitic resonance and dullness varied according to the position of the patient. He hiccupped violently, especially as he lay upon his back. I at once diagnosticated rupture of the bladder and feared, at first, that possibly my assistant had had something to do with it; but upon remembering the history which he gave, which corresponded to my experience in the case, I was satisfied that he had nothing to do with producing it. I succeeded in introducing an olive-pointed soft rubber catheter, which was tied in place. The patient died and we made a post-mortem, which shows that this conclusion was correct and sustained my diagnosis.

There were several somewhat peculiar features about the case, for instance, the man had no fever and made no complaint of anything unusual or of difficulty in passing urine; he knew of having sustained no blow or injury of any kind. As I have stated the man had been in the habit of using the catheter himself during twenty-five years two or three times a day, and I suspected that he partly produced this injury long before or that the walls were so thin that they had recently perhaps given way. The man died of collapse on the 16th. I considered that he was too far gone at the time of the discovery of his condition to justify anything like laparotomy; I think, however, I would, under such circumstances again, draw off the water above the pubic symphysis.

On making the post-mortem we found about sixteen hundred cubic centimetres (fifty fluid ounces) of urine in the peritoneal cavity and a good deal of plastic material covering the intestines everywhere. At the point of rupture the bladder was very much thickened and contracted; there was an opening about the size of an ordinary Faber pencil, you might say there were two openings united by disappearance of the trabecula of the tissues of the bladder. The point of rupture was at the summit of a sac about a half inch in diameter in each direction, from which it would appear that this fistula might have existed some time and the urine not be readily forced out, especially as he had been in the habit of using the catheter almost constantly. Looking into this pouch from the inside of the bladder, it was almost closed at its beginning by folds of the mucous membrane, running longitudinally into it, appearing like a sphincter. The thin-walled pouch is best seen by turning it outside in. I suppose the urine had at different times during the last sickness, passed through the little pouch in small quantities but had mostly dribbled away by the urethra; but the time came when it no longer passed by the urethra but entirely through the entering valve of this sac.

Dr. Mudd.—This is an interesting specimen, rather too interesting to pass without comment. The sac that is formed, it seems to me, must have had its origin or beginning some years back before the bladder had anything like the thickness that it has now in the greater part of its extent. It must have occurred at the time when the stricture was well formed, when the bladder wall was not thickened and when the muscular tissues of the bladder were more nearly normal and in the efforts made for the extrusion of the urine and when the muscles of the abdomen were also active. Now it is an unusual thing to see so well formed a sac as this and only have a single one; we may have a number of pockets formed in the bladder, as we find them in old men who have obstruction of the prostate; we may find them also as the result of stricture, but I have never met with a case in which the walls of the bladder are so generally thickened and in which there was a single pocket. I do not think it is necessary to assume that there was a rupture by the instrument here, I think it has been shown conclusively that it was not due to that. I think that before the time of his entrance into the hospital, the bladder had been ruptured and the urine had escaped into the peritoneal cavity; that it had escaped before the attention

of the surgeon was called to the case. It had probably occurred before the assistant made any effort to introduce a catheter into the bladder; this I assume first from the appearance of the case, and secondly from what I have seen in connection with rupture of the bladder. I remember two cases that I have met, where there was complete rupture of the bladder from violence and the urine escaped into the cavity, producing in the beginning but little pain, giving but little evidence of its entrance except the shock, and this came as a result of the accident rather than as the result of the extravasation of the urine. Now it is a well-known fact that urine may flow freely into a cut, and even though this cut is in the soft connective tissue where the meshes are open and porous, the urine may flow over it without much irritation unless some obstruction to the escape from the part occurs, when septic material may be found and in time infiltration take place. If there is a flow of the fluid with no obstruction it will in all probability cause no trouble. Before my experience with these two cases I supposed that the peritoneal cavity would be very sensitive to the extravasation of urine, but from my observation I am convinced that when it is first thrown into the cavity, if normal, it may remain for a number of hours, perhaps for 24 or 48 hours, without causing much pain. When decomposition occurs, when the fluid becomes irritating and when inflammatory action commences, then of course we shall have pain. This is an important case. The record ought to be made very clear because it may sometime help to elucidate a rupture which would otherwise seriously reflect upon the doctor who had sought to introduce a catheter. In the process of instrumentation in this case the point of the catheter must have been carried pretty well forward, and the opening as you see is on the posterior portion of the summit and rather back: it opens not exactly on the summit but points to the posterior wall near the summit, and the point as it was carried forward through the stricture and through the large prostate would be held close to the pubes. Did you use a grooved catheter?

Dr. Dean.—Yes, sir.

Dr. Mudd.—It would be pretty certainly carried forward toward the pubes and would not have entered this sac.

Dr. Bryson.—It seems to me that we might expect that urine escaping into the peritoneal cavity would cause trouble, that it would be extremely irritating. I agree pretty well with Dr. Mudd in re-

guard to the matter of rupture. It seems to me it would be extremely difficult to get an ordinary short curved catheter, such as is carried in the pocket-case in such a position as to cause this rupture. It seems to me the instrument would have been necessarily pressed too far back. There is one point in connection with this case that has occurred to me, and that is the use of the abdominal muscles in aiding a sacculated bladder. I have always thought that the aid of the abdominal muscles, the general abdominal pressure on the fundus of the bladder was about the safest aid to a sacculated bladder simply because the pressure comes from the outside of the bladder and not from its walls. If the bladder walls contract, the natural tendency is for the saccules to distend; but if the pressure is made from the outside, it seems to me that it gives support to the weakened saccules, which are really thinner than the bladder wall itself because the saccule wall is made by a separation of the muscular trabeculæ so that it is a hernia of the mucous membrane. I agree perfectly with Dr. Mudd in regard to the length of time saccules do exist; that the muscles contract around the opening and do not really close it and to a certain extent protect it.

RUPTURE OF THE HEART.

Dr. Mudd.—In connection with this subject of sacculation comes to my mind a specimen presented by Dr. McCandless which I saw not long ago from a woman aged 50 years. There was sacculation of the heart developed within the substance of the left ventricle, the wall had become thin and a sac had been formed from the membranes of the heart. Sacculation of the heart is a rare occurrence and a point of interest in this connection was the form of the rupture. In this case it occurred from blood being forced out by action of the heart just as the water was forced out of the bladder in the other case. The rupture occurred simply from fluid being exuded and was similar in shape in both cases. In regard to Dr. Bryson's point about the abdominal muscles, a case came under my observation some time ago of an old woman 62 years of age suffering from complete procidentia. Seven years ago the womb was replaced; at that time she passed a number of calculi. I saw her first on last Saturday. At that time the womb was outside the vagina and the bladder drawn down; she had been suffering with it for the last week, being unable to go about the house and attend to her

work and had been obliged to sit in a chair; there was a great deal of congestion and inflammation, and the bladder was situated in front of the tumor. The only way she could make water during the last years had been by the use of the abdominal muscles; she would bear down and push the contents of the abdomen down until the walls of the bladder were compressed and the urine would then rush out through the urethra. The curve of the urethra was so abrupt that you could not pass an instrument into the bladder; it was only and solely by the use of the abdominal muscles that the urine was extruded.

Dr. Bryson.—The only case I have seen of rupture is a case which was ruptured by some violent muscular effort. A St. Petersburg surgeon reported a number of cases and in the post-mortem developed the fact that they were in tolerably normal bladders, and that the rupture took place at certain points which had been noticed as being the weakest, and they were all followed by some acute rapidly oncoming inflammation that Dr. Mudd has spoken about. There seems to be no history of any violent muscular effort producing rupture.

INJURY FROM A TORPEDO.

Dr. Prewitt.—I have here a piece of a signal torpedo. A boy about 14 years of age was riding on a hand-car when a signal torpedo exploded, and a portion struck his left fore-arm on the inside, tearing a ragged ugly opening in the arm which bled quite profusely. The boy said a quart, but he may have exaggerated the quantity. The boys who were with him tied up his arm and carried him home. After he reached home a physician undid the bandages and the blood spurted out across the room quite freely for a little while and then stopped spontaneously. Another physician who was in the neighborhood was called in to see him, probed the wound and was unable to find any foreign body; it was redressed and looked after perhaps for some days. About the ninth day it commenced to bleed again quite profusely, his father said a quart.

On the eleventh day it bled again, the boy says a wash-pan full. On the thirteenth day it bled very profusely until the boy was almost exsanguinous. That night his father put him on the cars and brought him to me. I found him very pale with a rapid pulse and the arm swollen. There was a ragged sloughy looking opening; there had been a bandage placed over the artery above, to restrain

the bleeding, which I removed and found it did not bleed at the time. However, as soon as I could place him under an anesthetic, I ligated the brachial artery. I enlarged the wound and passed in my finger and found quite a large cavity mostly filled with clotted blood and pus and so on, and in feeling around I struck this foreign body, which had lodged up under the elbow, pretty near the left side of the origin of the radial artery. I removed it with a pair of forceps and cleaned out the cavity. That night it commenced to bleed quite profusely, although I had ligated the brachial artery; I closed the bleeding points with my fingers as well as I could, and felt satisfied it was simply the collateral circulation, the result of the inflammation, etc., but in cleaning off the surface I found that the ulnar artery had been injured and that a little aneurism had formed, perhaps as large as a thimble upon one side of the artery. This gave way as I cleaned off the surface and left the lower wall of the artery bare for half an inch, the upper wall coming away as I rubbed off the surface. Either end of the artery was open of course, and upon removing the pressure the blood poured out of this artery. I tied that and the hemorrhage ceased; there was no pulse at the wrist of course for three or four days. The temperature next day was 103° —it was fully that at the time I operated, I am sure, although I did not take his temperature. By thoroughly washing out and draining the cavity, the temperature subsided the next day very considerably, although not quite to the normal, getting down to $101\frac{1}{2}^{\circ}$ perhaps, but in the course of two or three days the fever subsided. The wound made in ligating the brachial healed up by first intention, and I never changed the dressing until it was well. The boy went home yesterday the wound granulating, healing nicely.

DISLOCATION OF HUMERUS IN A MAN AGED SEVENTY-FIVE.

I had an interesting case to-day of an old gentleman who said his age was sixty-six years, some of his friends stated he was nearly seventy-five. Something over two months ago he fell, and in falling he threw out his arm, causing a dislocation of the left shoulder, great swelling taking place before a physician in the neighborhood saw him, and the dislocation was not recognized; but when he came to me this morning, I found the head of the humerus resting upon the coracoid process. He had very little use of that arm, which was quite painful, even when not in use, but

very painful when he attempted to use it. The deformity was very marked, some atrophy of the deltoid muscles, depression under the acromion process, the elbow rather projecting backwards and out from the body; inability to place the hand upon the opposite shoulder while the elbow was kept in contact with the chest. He carried his hand mostly in a sling, and taking into consideration the man's age, he being 65 or 75 years of age, it was a little questionable whether it was proper to attempt a reduction after two months, but he was exceedingly desirous to have me attempt it. I suggested to him that the only way in which it could be done would be for me to place him under an anesthetic and apply the pulleys so as to loosen the head of the bone, using more or less manipulations, first breaking up the adhesions, etc. We did this, and I finally succeeded in getting the head of the bone into position very fairly without accident. Of course, in a man of his age there is always risk of injury to the axillary artery and vein, and when one undertakes this sort of an operation for dislocation in an old man, it is with a good deal of trepidation as to the result, as there is liable to be a rupture of these vessels. There have been quite a number of attempts at reduction in old persons, and with generally fatal results.

NECROSIS OF ENTIRE PATELLA.

Dr. Mudd.—I have a specimen which may be of interest; it is unique, so far as my knowledge of the literature is concerned, and so far as my practice extends. This was taken from a little patient aged eight years, who was kicked upon the patella or knee on one day, and the next day was taken sick. An inflammation followed with suppuration, abscess and necrosis. I was called after the abscess had been opened and after the inflammation had extended to the connective tissue of the thigh. He had a suppurative sinus extending well up towards the upper extremity of the femur. I found I could put my finger pretty well around the femur at several points. I put in drainage tubes under the knee so as to fully drain the joint, there was no inflammation of the tissues of the joint up to this time. In opening the abscess over the patella I found a piece of bone which I removed and which I took to be the patella, and I think it is the complete patella; it shows all the outlines and characteristics of the complete patella as perfectly developed as would be at that age. I think this is in-

teresting, because it shows that such a condition could occur without opening the joint, and it tends to show that we can remove at least the greater portion of the patella without injuring the joint. It was interesting to me on this account. It was also interesting because of an occurrence which happened during the treatment of the case. The patient was the child of divorced parents, the child was in charge of the mother and I attended him at her instance. During my attendance a distinguished surgeon of the city was called in to see the case by the father, and upon examining it he stated that it was utterly impossible that such a thing should occur. I suppose he could make that statement only upon strictly scientific grounds, and I would like to know on what basis the scientific deduction was made—what premises for this deduction had he? It is a well established fact that the patella in the adult may be almost entirely removed without opening the joint by scraping away the softened or inflamed bone. It seems then not unreasonable that the bony part of the imperfectly developed patella should be loosened and cast off by the inflammatory process in a boy; that the patella must be there still.

Dr. Previtt.—I suppose that is intended for me. I was called to see the patient from which this was taken, but I did not examine him very closely—of course I did not go into a critical examination of the case. I found the case in charge of some one else, and I refused to have anything to do with it, but they told me that Dr. Mudd had removed the patella and that there was no suppuration of the joint at all. I did state that it seemed scarcely probable; that such a condition of things would certainly be very extraordinary; that I supposed that some portion of the patella was still there; I supposed that perhaps a layer of the patella had been exfoliated, and that the whole patella had not been removed, although, as I say, I did not make the examination to determine that question very carefully, but I do certainly think it a very extraordinary statement, that the whole patella should come away without opening the joint, and I think Dr. Mudd will concur with me that this is a very extraordinary condition of things, and I really suspected that such was not the case, that a portion of the patella probably had exfoliated, and I simply made the statement that I expected there was some portion of the patella there yet. Now that looks like the outline of the patella, and it certainly does look as if perhaps it might be the entire thickness of the bone. These people must have

misunderstood what I said in regard to the case, however, as I did not say that it was impossible that Dr. Mudd had removed the entire patella. I did not intend to contradict any statement that the doctor had made. I said that it was questionable whether the doctor had made such a statement, that he probably did not intend to state that the entire patella had come away.

Dr. Mudd.—I could readily understand the doctor's position. This injury occurred on March 8, I think, and this was removed about six weeks after the injury.

TWISTING THE UMBILICAL CORD.

Dr. Funkhouser.—I would like to call the attention of the society to a matter which is of considerable interest to me, viz., the twisting of the cord of the placenta. From observations that I have made, I believe that we shall find in a typical male child that the twisting of the cord will be in one direction and in a typical female child in the opposite direction. In one case that I have recently seen this idea was fully confirmed. Twins of opposite sex were born in separate bags or membranes and the twisting of the cord was in opposite directions. The placentæ also were on opposite sides; in the typical female the placenta was on the left side, in the typical male on the right. These remarks may not be clear to those present, but it has a connection with the subject of the determination of sex, and, for my own information, I ask that those who have many obstetrical cases will pay attention to this point.

Dalton in his *Physiology* refers to the twisting of the cord. He states that in 260 cases 138 twisted from left to right; in 112 cases from right to left. In some the twisting was imperfect.

TYPICAL MALES AND FEMALES.

Dr. Kingsley.—I would like to ask Dr. Funkhouser what he means by typical male and typical female children?

Dr. Funkhouser.—From some experiments which I have performed I have found that the pups as the result of a fruitful union of a male dog from which the left testicle has been extirpated with a bitch from which the left ovary has been removed, will be male; where there is union of a dog from which the right testicle has been removed with a bitch having the left ovary only, the result of pregnancy will be female pups.

I find that the ovaries have nothing to do with the determination of sex in general. In the paper published, the subject is discussed

at length. Of course these experiments cannot be made on human beings, but it will be seen that a typical male or female child is one in which the zoosperms from one testicle unite with the ovum from the ovary of the corresponding side; for instance, the union of the zoosperms from the right testicle with the product of the right ovary would produce a typical child; whereas, one that is the result of the union of zoosperms from the right testicle with an ovum of the left ovary would not be a typical child. The theory has been advanced that the determination of sex is dependent upon the number of zoosperms that enter the ovum, but this theory has been proven to be incorrect.

It has also been stated that the determination of sex is dependent upon the time at which the connection between the sexes occurs; but this is upon the assumption that at one period a greater number of zoosperms reach the ovary than at another; that in the case of a large number of zoosperms reaching the ovum there would be a male child. I do not accept them because the experiments I have performed lead me to think otherwise.

Dr. Leete.—I would like to ask Dr. Funkhouser if I understand him to tell us that in some experiments which he has made he has found that by removing the right testicle of the dog and the right ovary of the slut the entire litter of pups resulting from the union of these two animals were males?

Dr. Funkhouser.—Yes, sir.

Dr. Leete.—And the converse where the left testicle of the male and the left ovary of the female were removed, that the litter was composed all of females?

Dr. Funkhouser.—Yes, sir.

Dr. Leete.—And have you repeated the experiments a number of times with the same result?

Dr. Funkhouser.—Yes, sir; there was one exception that I reported, but that I explained satisfactorily.

Dr. Leete.—Only one out of a large number of experiments?

Dr. Funkhouser.—Between and thirty and thirty-five.

Dr. Schenck.—There is one thing that I noticed in relation to knots in the cord. I have seen them occur in both boys and girls. I have not seen a knot in the cord unless it turned to the left of the child; the cause I am very anxious to find out.

Dr. Prewitt.—I happened on last Saturday evening at the St. Louis Medical Society to hear some discussion upon a paper of Dr. Funk-

houser on this subject. I was not so fortunate as to hear the paper, but so far as I could learn, Dr. Funkhouser's theory is that the testicle determines the sex—the right or left testicle determines the sex and that the ovaries have little or nothing to do with it. Now as it happened Dr. Gregory had the record of a case where he had removed the right testicle twenty years ago in a patient in Illinois and who had had nine children since the operation, and eight of them were males and one of them female. Now if that were true it would seem to present a formidable obstacle to this theory of Dr. Funkhouser's. If it were a fact that the right testicle produces offspring of one sex and the left of another, this matter would have been settled long since by stock raisers, to whom it is a matter of immense interest. For my part I don't believe there is anything in it. I would not believe it unless there had been a sufficient number of experiments to settle the question beyond all doubt. I do not believe that one testicle or the other determines the sex. I think the man is supplied with two testicles and woman is supplied with two ovaries to insure the propagation of the species, not to determine the sex. It is to make the propagation of the species a paramount fact, and that we may have males and females begotten indiscriminately whether man has one testicle or two.

Dr. G. A. Moses.—This subject which has been brought up by Dr. Funkhouser is a matter of physiological interest, and, as Dr. Prewitt justly said, it will take a very large number of experiments carefully carried out by prudent and careful observers before we can arrive at any conclusion in this matter. The number of causes for the determination of sex to which it has been attributed are countless. The difference in the sexual desire is stated very decidedly to be a predominant cause of the production of sex. As the sexual desire is stronger in the one than the other it has been said the sex is determined. It seems to me that there are various conditions which should probably be taken into account such as the condition of health or sickness, and a great many other conditions that cannot be foretold. I can recollect some instances, and one particularly, in which a mother bore twelve children; she was a woman at the time I knew her, not young any longer to be sure, but still she was no doubt endowed with as little sexual desire as most women are; while her husband was a man full of animal desire—full of virility. I have very little idea from my experience with different people that they ever contemplate at the time of in-

tercourse whether it should result in conception and if so whether the product should be male or female; and I think this will hold good as a rule of life both in the higher and lower orders; that it is a pure accident both as to the time and the condition of coitus.

CHICAGO MEDICAL SOCIETY

Regular Meeting Sept. 1, 1884. President D. A. K. Steele, M. D. in the chair.

REMARKS ON ANEURISMS.

This was the title of a paper read by Dr. J. A. Robison, of which the following are the principle points.

We will omit referring to the etiology, pathology, or diagnosis of aneurisms, and proceed to give the general principles governing the treatment, which have been to prohibit the patient from taking much exercise, to secure as nearly as possible absolute rest, and to restrict the diet. When the heart is tumultuous, cardiac sedatives are exhibited, and such symptoms as dyspnea, pain, etc, etc, have been met with appropriate palliatives. The first attempt at specific treatment for internal aneurisms was employed many years since by Albertini and Valsalva, and has been known as Valsalva's method; it consisted in weakening the patient by repeated blood lettings, and by gradually diminishing his meat and drink, till only half a pound of pudding was taken morning and evening, with only a measured quantity of water, so that at last the patient was so exhausted he could not lift his hand from the bed in which he was ordered to lie from the commencement of the treatment. When this stage was reached the amount of nutriment was increased until the patient's strength was restored, but this plan of treatment did not yield the beneficial results which were anticipated. In our day it would be regarded as barbarous were we to try and enforce this treatment to the extreme which Valsalva reached. A modification of this method, consisting of enforcing absolute rest and diminishing the food and drink, so as to diminish the quantity but not the physiological quality of the blood, has benefited a number of cases, if not entirely cured them. While some physicians have refused to employ the depleting treatment, they have resorted to measures fully as severe. Dr.

Murchison and Mr. Moore, of England, have recommended, and in one case tried, the introduction of fine wire into the aneurismal sac, on the theory that the large amount of surface exposed to the circulating fluid would produce coagulation of the fibrin. In the case referred to, they introduced twenty-six yards of fine iron wire into the aneurismal sac, and it is needless to say, that the treatment was unsuccessful, although they contend that the result obtained demonstrated that the principle was sound, and that further experiments were justifiable. A much less dangerous and probably more efficient mode of treatment is by electrolysis. Pravaz was the first to use electrolysis for reducing external aneurisms, and Cinicelli and others have applied it to internal aneurisms, but with very indifferent results. In eight cases of thoracic aneurism, only one was benefited; only one case of abdominal aneurism was cured, and this patient died from rupture of the sac on account of premature exertion. The results obtained from the use of the galvano-puncture have not justified us in expecting for much from that method. Professor Langenbeck has published accounts of two cases which he claimed to cure by hypodermic injections of one half to three grains of Bonjean's watery extract of ergot, every three days. Balfour says he has tried this method frequently, but without any success, although he was positive that his ergot was active. Pressure as a mode of treatment is wholly inapplicable to thoracic aneurisms, and rarely to abdominal aneurisms, Dr. Murray records a case of the latter, in which pressure on the aorta for five hours, the patient being under chloroform, was successful. Treatment of internal aneurisms by administration of the iodide of potassium is conceded by Flint and Bramwell; and it is insisted on by Balfour, that the iodide of potassium is the only drug which offers any hope of cure, and in every case it will relieve the distressing symptoms. This author says: "Of all the various modes of treating internal aneurisms there is not one hitherto mentioned which is not attended with considerable risk, while the advantages to be derived from some of them are, to say the least, very problematical." The writer claimed the treatment by the iodide of potassium is perfectly safe and free from all risk, and it is equally certain to afford relief, although relief is not always to be got instantaneously. It relieves the pain and other symptoms of aneurism more rapidly and more effectually than any other treatment, apart even from the powerful agency of the recumbent pos-

ture. The relief to the pain and other symptoms is so great and so rapidly obtained, usually from the drug alone, that it is often difficult to get the patient to submit to any restrictions. The author of the paper has employed this method of treatment during the last eight years in a very considerable number of cases, with unvarying success so far as the relief to symptoms is concerned, and with such favorable results as to retarding the further progress of the case, even in some cases promoting an apparent cure, as certainly to stamp this treatment as one of the most efficient hitherto propounded for the relief of this intractable complaint. Balfour relates the history of twelve cases treated by this method with the following results; the symptoms such as pain, dyspnea, etc, were relieved in every case. The physical signs of aneurism were diminished in seven cases, pulsation of the tumor ceased in two cases, diminished in four, and was not apparent from the commencement in six. The aneurismal tumor disappeared in three cases, and diminished in five. The bruit disappeared in two cases, and diminished in two cases, but never existed in two cases. Five of the patients were so relieved that they could work, four were discharged at their request, feeling well, one patient absconded and the result of treatment in his case is not known. Five cases were termed cured, and seven were relieved; one of the twelve cases referred to was an aneurism of the innominate artery, which was cured, and Balfour claims to have cured several cases of aneurism of this artery. One of the four cases discharged at their own request was under treatment three different times, being discharged twice at his own request, but died suddenly while under the third course of treatment, the autopsy revealing aneurism of the aorta which had ruptured into the lower lobe of the right lung. One of the twelve cases was diagnosed as a weeping aneurism, implicating the origin of the left carotid, and communicating by a small opening with the left bronchus, the patient on admission expectorating arterial blood, but this soon ceased and the patient was discharged cured. While the writer did not believe he was justified in being as enthusiastic in the praise of the iodide of potassium treatment as Balfour, he believed he was justified in relating the following case, and giving the iodide of potassium the credit of prolonging the patient's life and making his days comparatively comfortable. John H. C., aged 40. a blacksmith, was first seen March, 1883. Had had attacks of inflamma-

tory rheumatism several years ago. In February, 1883, he was attacked with severe pains in the chest in the pre-cordial region and was treated by his physician for rheumatism, for some weeks. Dr. J. P. Ross saw him and diagnosed aneurism of the aorta. At this time the patient had a good deal of dyspnea, some hoarseness of the voice, and quite a little difficulty in swallowing solid food. When fatigued the pains in his chest were excruciating. No tumor was perceptible, although there was pulsation in the upper sternal region, and dullness upon percussion over the area of pulsation. Two months afterward there was a swelling in the upper sternal region at the junction of the left first and second ribs about the size of a silver dollar. A very slight bruit was heard. The voice was very husky, and the difficulty of deglutition had increased until now the patient could take no solid food whatever. He had emaciated and was losing strength very rapidly. He was ordered to lie in bed continuously, and was given fifteen grains of the iodide of potassium three times daily, gradually increasing the dose until signs of iodism appeared. It was truly remarkable how soon after this plan of treatment was inaugurated the patient expressed himself free from pain and the distressing symptoms from which he had suffered. He persevered this way until May, when he said he was so well and weary of the bed he would like to sit up. Leave was granted. A few weeks after the writer was surprised to see him walk into his office. The patient complained of nothing. He was cautioned against such rash experiments and told to return home and take better care of himself. His condition at this date was as follows: The continued pulsation of the tumor against the chest wall had produced absorption of a large portion of the manubrium and an inch of the inner portion of the left first and second ribs, consequently we could feel the pulsations of the tumor through the chest wall at a point where only soft tissues intervened. No bruit was discernible.

On laryngoscopic examination there was found complete paralysis of the left vocal cord. His voice was anserinous. During all these months he had been taking the iodide of potassium without any disturbing effects, until now, when he complained of symptoms of iodism. He was permitted to discontinue its use. From the date of this office visit the patient became rapidly worse. He rapidly emaciated, dyspnea and dysphagia increased, and finally he died of asthenia July 19, 1884.

Autopsy: on opening the thorax, a large aneurismal tumor was seen behind the sternum about five inches in diameter. Friable adhesions of the sac to the sternum were broken up when the sternum was removed. Absorption of a large portion of the sternum and the left first and second ribs had taken place. Heart and pericardium were normal. Adhesions between the aneurismal sac and the left lung. The left lung was pressed upward and backward into the left pleural cavity, and collapsed. On opening the heart found the aortic valves roughened. Extending the incision into the arch of the aorta it was dilated and at the anterior of the arch between the origin of the innominate and the left carotid arteries, an opening, oval in form, one inch by one inch and a half, into the sac of the aneurism. Through this opening the wall of the aorta was continuous, forming the wall of the aneurism. The tumor was firm, being composed of coagulated fibrin, which was then exhibited by the reader, who replied to numerous informal questions that were propounded.

Apropos to this subject, Dr. John Bartlett cited briefly the history of a case of *general chronic bronchitis and asthma* occurring in a man 70 years of age who was supposed to be suffering from consumption for 50 years. Eight years ago when the patient came under his observation, he ordered him to take eight grains of the iodide of potassium three times a day. He has not omitted a day to take the medicine since, and he has steadily improved; his kidneys have performed their normal function; his appetite has not been impaired, and he has grown fatter and stronger. The case is an illustration how long a patient may take the iodide of potassium continuously without injury to the mucous membrane of the stomach or injuring the kidneys.

This was followed by a paper entitled "The Recent Treatment of Asiatic Cholera as in vogue by European Surgeons of Late Years in Southern India," which was read by Dr. H. M. Scudder. It has been the writer's fortune, perhaps, to practice his profession in India for nine years and pass through four epidemics of cholera and have the disease. He was the only European physician in a town of 50,000 inhabitants and was at the head of a distinct hospital supported by the English Government and was called to treat a large number of cases. One of the severest of these epidemics occurred during the famine of 1877-1878.

The writer was at that time assigned to take medical charge of

a large inclosed famine relief camp containing over 5,000 persons and where often as many as a 300 at time were ill with the disease in the hospital sheds with a death roll during the height of the epidemic of over 50 per diem. In this camp he had the opportunity of trying on an extensive scale different remedies and the various modes of treatment and comparing the results. We will not take space by the enumeration of the long list of remedies that have been made use of in the treatment of cholera, or by the discussion of the value of the numerous and various forms of treatment that have been advocated but confine this synopsis to the following brief epitome.

First. To relieve the frequently experienced prodromic symptoms, give ten or fifteen drop doses of spirits of camphor in dessert-spoonfuls of hot brandy.

Second. In the stage of diarrhea, give chlorodyne with spirits of camphor in alternation with an aromatic sulphuric acid mixture.

Third. In the stage of invasion apply dry heat and mustard plasters and resort without delay to the administration of morphine or morphine combined with chloral by hypodermic injection, if a few doses by the mouth have not been effectual in checking the disease, and give in addition enemas of acetate of lead.

Fourth. In the stage of collapse, enforce perfect quiet and the horizontal position, anoint the surface and limbs with hot oil, administer atropine and strychnia hypodermically, and give very small doses of alcoholic stimulants by mouth, rectum or hypodermic injection.

Fifth. In the stage of reaction, give mild diuretics and, if necessary, an emulsion of carbolic acid and sub-nitrate of bismuth in gum Arabic water or give carbolic acid and tincture of iodine, together with biomide of potassium for insomnia when required, not forgetting to administer well salted, hot liquid nourishment in very small quantities as soon as the stomach will tolerate these. Finally, in addition to the other remedies indicated burn sulphur in the patient's room, or in place of it administer sulphuric acid with glycerine in small doses during the first and second days of disease.

The paper was well received and evoked much discussion which lasted until a late hour and was participated in by Dr. G. C. Poole, Dr. R. H. Engert, Dr. John Bartlett, Dr. J. H. Etheridge, Dr. T. E. Starkwater, Dr. G. Newkirk, Dr. D. O'Shea and the author,

which for want of space we are obliged to omit further proceedings.

A motion prevailed that the society do now adjourn.

LISTON H. MONTGOMERY, M. D.

Secretary.

Stated Meeting, Sept. 15, 1884.

"Congenital Malformation of the Stomach" was the subject of a paper read by Dr. C. W. Earle, who exhibited the pathological specimen of a child's stomach that survived twelve days, there being no opening into the duodenum, although biliary matter was found in the fecal matter.

The same gentleman also exhibited a bony tumor weighing $3\frac{1}{2}$ lbs from a female pelvis. The specimen is regarded as a rare one.

The Secretary, Dr. Liston H. Montgomery, presented the following preamble and resolutions and moved their adoption.

WHEREAS, From present reports and indications in foreign countries, Cholera and Yellow Fever (both pestilential diseases) prevail, and as the latter especially is always assuming a threatening attitude toward us, and is not conducive to our national prosperity, nor to public health, and should, if possible, be averted with earnest and efficient sanitary measures, and

WHEREAS, Cholera may make its appearance on this continent ere another twelve months shall elapse, and should, likewise, if possible, be averted or restricted to the narrowest limits, therefore

Resolved, That it is the sense of the Chicago Medical Society to have that department of the government relating to public health recognize the services of able sanitarians who constitute the National Board of Health, for the purpose of co-operating with municipal, state, and other organizations of a similar kind, and that a committee of seven members of this Society be appointed by the Chair to draft suitable resolutions in behalf of said National Board.

Resolved, Furthermore, that this committee, present said resolutions to the Congress of the United States, memorializing that body to make a sufficient appropriation for the purpose of said Board for scientific investigation in the prevention and restriction of epidemic, preventable and pestilential diseases.

We believe this action should be promptly taken at the coming

session of our national legislature, and that a thorough sanitary organization of the nation should be recognized, and with it absolute enforcement of the best means for the protection of her citizens, and the improvement of our inter-state sanitary condition.

The resolutions provoked a great deal of discussion, which was participated in by many of the influential members of the society.

The motion that they prevail was unanimously carried. The committee was authorized to refer them to the society for a final consideration and then to the Congress of the United States, "memorializing that body" etc., etc.

The following comprise the committee of seven:

DR. O. C. DEWOLF.

DR. R. E. STARKWEATHER.

DR. L. H. MONTGOMERY.

DR. JOHN BARTLETT.

DR. J. H. ETHERIDGE.

DR. A. R. JACKSON.

DR. J. H. HOLLISTER.

SOUTHERN NEW MEXICO MEDICAL ASSOCIATION.

An organization of the physicians and surgeons of Southern New Mexico was effected at Las Cruces, July 17, at which were present representative physicians from the counties of Dona Ana, Socorro, Sierra, Grant and Lincoln.

After the usual routine of business had been completed, the following officers were elected for the ensuing year:

President—Dr. O. H. Woodworth, Las Cruces; 1st Vice-President—Dr. C. H. Brown, Rincon; 2nd Vice-President, Dr. C. G. Duncan, Socorro; Secretary and Treasurer—Dr. James P. Booth, Las Cruces. Board of Censors: Dr. J. V. Cowan, Organ; Dr. Jesse E. Thompson, Lake Valley, and Dr. John Fraser, Las Cruces.

The President appointed the following committees:

Therapeutics and New Remedies—Dr. C. H. Brown, Rincon. Surgery and Anatomy—Dr. W. J. Nickerson, Silver City. Obstetrics and Gynecology—Dr. Edwin Burt, Organ. Epidemics, Climatology and Practice of Medicine—Dr. Lewis Kennon, Silver City. Essayist—Dr. Jesse E. Thompson, Lake Valley.

The Constitution adopted provides that none but graduates of

regular medical colleges be admitted to membership, thus ignoring the certificate of the Territorial Board of Medical Examiners.

Although no papers were expected, Dr. Thompson, of Lake Valley, reported two cases of fracture, one of the astragalus, the other, of the lower jaw. The former case was made the more interesting by the exhibition of the fractured bone. The same gentleman also read a very elaborate and well-prepared paper on "Mountain Fever," which was discussed at some length.

Dr. Cowan, of Organ, reported a very singular case, probably hystero-epilepsy, and asked for aid in diagnosis and treatment from the members, promising to carefully watch the case and report final results at the next meeting.

The following resolution, introduced by Dr. Booth, of Las Cruces, together with the adoption of the Code of Ethics of the American Medical Association, serves to show the praiseworthy determination of the society.

WHEREAS, The elevation of the profession is the ultimate object of all medical societies, and,

WHEREAS, Nothing will more certainly conduce to this desideratum as a higher standard of Medical Education; be it therefore,

Resolved, That this organization heartily approve of, and indorse the three term plan recently adopted by many of the medical colleges of the United States; and be it further

Resolved, That we deem it our imperative duty to discourage the study of medicine by those who have not received a good common English Education, and acquired a sufficient knowledge of the Greek and Latin languages to pursue their studies intelligently.

Dr. Booth introduced the following resolution:

WHEREAS, The sad news reached us some months since of the death of Prof. Samuel D. Gross, of Philadelphia, be it by this society

Resolved, That in the death of Prof. Gross America loses her greatest surgeon, the American profession one of its greatest teachers, and the world at large, one of the most brilliant luminaries in the constellation of renowned surgeons.

Resolved, That we, the physicians and surgeons of Southern New Mexico, take advantage of this, the first opportunity presenting itself, to express our heart-felt sorrow at the demise of this great man; and while he went to his last resting place full of years, and after much and long-continued labor, we feel that his loss is a great one, and we mourn it as the loss of our common family. Owing to the

late washouts in the A. N. & S. F. R. R., the attendance was much smaller than anticipated, there being but fifteen physicians present, but it is confidently expected that a much greater number will be present at the next meeting in Las Cruces, the second Tuesday in October 14, 1884.

INTERNATIONAL MEDICAL CONGRESS.

The eighth triennial International Medical Congress was held in Copenhagen August 10-16, 1884. The attendance was large, about 1800 being enrolled, and the meeting was both interesting and profitable.

Great credit is due to the officers and committees for the painstaking care which they had expended in making preparations for the successful work of the Congress as well as for the comfort and pleasure of the members in attendance.

We note with pleasure the fact that our friend Dr. Geo. J. Engelmann was elected one of the honorary presidents of the section of obstetrics and gynecology, and that he is one of the central committee of organization for the ninth session of the Congress, which is to be held in Washington in 1887. We shall not attempt to give here any detailed account of the several sections, but shall give our readers elsewhere abstracts and selections of some of the most interesting and valuable papers.

One provision for the comfort of the members that conduced much to their convenience was the arrangement for a lunch in a hall near by that in which the sessions of the Congress were held.

The sessions of the sections were held in the morning and early hours of the afternoon, the general sessions in the afternoon from half past three to five o'clock.

At these general sessions were presented the addresses of Prof. Pasteur on Pathogenic Microbes and Vaccinations; of Prof. Tommasi Crudeli on the Natural Production of Malaria and the Method of Rendering Wholesome Malarial Regions; of Prof. Verneuil on the Neoplastic Diathesis; of Prof. Virchow on Metaplasia, and that of Prof. Panum on the Rations of Food of Healthy and Diseased Men in Hospitals, Infirmeries and Prisons of Different Countries.

There were fourteen sections, viz., anatomy, physiology, general pathology and pathological anatomy, medicine, surgery, obstetrics and gynecology, ophthalmology, pediatrics, der-

matology and syphilis, psychiatry and neurology, laryngology, otology, hygiene and public medicine, and military medicine.

Among the festivities which were provided to lighten the more serious work was the dinner given Sunday evening by President Panum to the former presidents and to the honorary presidents of the Congress and the sections. This was an elegant entertainment, and was greatly enjoyed by the favored ones who partook of it, some three hundred in number.

Monday evening was given up to section dinners, affording to the members of the different sections opportunity to make the personal acquaintance in a social way with their co-laborers.

Tuesday was given up to private hospitality, which was lavishly extended to visiting members.

Wednesday there was a grand excursion by steamers to Elsenør and the castle of Kronborg, where lunch was spread for the whole company, numbering some 2,000.

Thursday afternoon, immediately following the general session, the members of the Congress to the number of fourteen hundred, were entertained with a grand banquet tendered by the Municipal Congress of Copenhagen. A large tent was erected for the occasion on the Custom House quay. The flags of all nations were arranged tastefully about the interior of the tent, and the tables were profusely decorated with flowers. After ample justice had been done to the viands supplied, speeches were made by Pres. Panum and Profs. Pasteur, Paget and Virchow. A steamboat excursion to the Tivoli gardens was enjoyed by a number of the guests, and later in the evening there was a grand display of fireworks and electric lights.

Friday evening the Kings and Queens of Denmark and Greece gave a brilliant reception to the Congress at the Christianborg Palace with music and a sumptuous supper, at which the King of Denmark proposed the health of the foreign members, the response being made by Sir Wm. Gull.

Saturday evening a farewell fete was given at the National Establishment, a concert, reception, ball and supper, eighteen hundred guests being present.

The Eighth International Medical Congress was a grand success. It will be necessary that our committee on organization bestir themselves early and work zealously and with system and tact to so arrange affairs that the Ninth Congress, which we have to arrange for, shall not be completely eclipsed by the brilliancy of this which has just closed.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

BRITISH MEDICAL ASSOCIATION.—DR. ORD'S ADDRESS.—MYXED-
DEMA.—NERVOUS SYSTEM IN DISEASE.—AMERICAN DELEGATES.—BRITISH PHARMACOPEIA.—PATENT MEDICINE
STAMP ACT.—ROYAL COLLEGE OF PHYSICIANS ON
CHOLERA.

LONDON, August, 1884.

A most successful meeting of the British Medical Association has just been concluded at Belfast, in Ireland. It is stated that six hundred medical men attended the meeting. The meeting was transacted in the Queen's College, a most suitable and convenient building for the purpose. The numerous class rooms were devoted to the sectional meetings and the fine library belonging to the college was used for the general meeting. The President of the Association for the year was Dr. James Cuming, Professor of Medicine in Queen's College and Physician to the Royal Hospital at Belfast. An address in Medicine was delivered by Dr. Ord, physician to St. Thomas' Hospital, London, on "Some Disorders of the Nutrition Related with Affections of the Nervous System," and contained matter eminently calculated to stimulate thought and provoke controversy.

The influence which the nervous system exerts over all the vital functions, such as respiration, digestion, assimilation and secretion, and the control it exercises over the process of nutrition of all the tissues of the body, has lately been much more fully recognized and has led to the formation of what may be called a school of neuro-pathologists.

In the early part of the year Dr. Clifford Allbutt, of Leeds, in a course of lectures he delivered before the Royal College of Physicians in London maintained that many diseases, especially of the abdominal organs, were due to derangements of the nervous system, and in reality neuroses. This line of argument was followed up by Dr. Ord in his address before the British Medical Association. He pointed out that chronic rheumatic arthritis occurred more commonly in women, and was associated with uterine troubles,

chiefly engorgement and inflammation of the uterus, leading to nerve irritation, which being reflected back upon the spinal cord interfered in some way with the trophic centres which preside over the nutrition of the tissues entering into the formation of the joints.

It has long been noticed that women are usually the subjects affected with rheumatic gout and that the joint affection had some relation to uterine trouble, either connected with menorrhagia, loss of blood following a mis-carriage, or defective or difficult menstruation. The early authors who noticed this relationship attributed it to the absorption into the blood of a virus generated in the uterus, which attacked the joints through some unknown process of elective affinity. Dr. Ord in his address said: "There are not a few considerations which induce me to oppose to this humoral and chemical view the view of nerve agency. Putting aside those peculiarities of personal constitution which render certain persons prone, under many circumstances involving febrility, to develop joint affections, particularly acute rheumatism, I would represent that at least a very large majority of women having nodosity of the joints or arthritis deformans, present in the first place a marked hyperemia of the os and cervix uteri. That these organs have the power, through centripetal nervous influence, of producing enormous excitement in the spinal cord is the next point which may be taken. Sometimes, the excitement may show itself by pains in limbs; sometimes by flushings of skin, sometimes by swellings of the breasts. Sometimes, as it appears to me, the effects of excitement may be reflected along the same paths which in primary affection of the spinal cord have led to affections of the joints. Moreover, the state of the patients under consideration is generally one of debility, often one of anemia. It is a matter of daily experience that in such conditions the reflex excitability of the spinal cord is increased; it explodes, so to speak, on the application of impulses which, in its proper nutrition, it would transmit. And so both the local and the general state would conduce to the reflection."

Senator in his paper on Arthritis Deformans in Ziemssen's *Cyclopedia* says: "The usually symmetrical order of its invasion can hardly be explained, unless we assume the existence of some central causes situated in the nervous system. The disease is often associated with neuralgic and tropho-neurotic symptoms. Finally, some results of treatment, particularly those recorded by Remak

and others concerning the effects of electricity directed to the central nervous system serve likewise to support this view."

Dr. Ord also referred to the nervous relation of myxedema, and alluded to the most interesting fact that the disease was associated with atrophy of the thyroid gland, and the relation which is supposed by many to exist between that gland and the sympathetic system. In Switzerland the removal of this gland by operation has led to the development of symptoms corresponding exactly to myxedema as observed in this country.

At a recent meeting of the Royal Medical and Chirurgical Society a paper by Dr. John Harley was read on "The Pathology of Myxedema as Illustrated by a Typical Case." The case had formerly been under the care of Dr. Ord in St. Thomas Hospital. In the discussion which followed Dr. Ord said, "He was glad to find that Dr. Harley was inclined to fully recognize myxedema as a definite clinical condition, and that he had confirmed the observations of others with regard to the diminution of the amount of urea excreted and the low temperature. As a rule, the signs of impairment of the central nervous system were well marked, defective memory and alteration in temper going on to conditions of lunacy; indeed, a considerable number of the cases which had been observed had been found in lunatic asylums. Marked changes had been found in the brain and spinal cord, chiefly increase in the connective tissue. Dr. Harley, if he had understood him a right, argued that the original lesion was pulmonary or pleural, and from that arose atrophy of the sympathetic and thence myxedema. In such a view, he left out of sight entirely the atrophy of the thyroid body, which was a very rare condition, while cases of fibrous degeneration of the lungs without myxedema were very frequent. The evidence in favor of some connection between atrophy of the thyroid gland and myxedema was now so strong as to be almost convincing. He thought much importance attached to the theory of some chronic inflammatory affection of the sympathetic system, a view which had been advocated by Dr. Hadden and was worthy of attentive consideration. In the earlier attempts at classifying the disease, some had pressed its alliance with chronic renal disease and some with cretinism; something had been learnt from the former proposals, and something would be learned from the present one, but he thought that the clinical and pathological facts did not afford sufficient grounds

for coming at present to an entirely satisfactory solution of the question of the nature and etiology of the disease.

Dr. Ralfe of the London Hospital said that "it might fairly be assumed that myxedema was a retrograde metamorphosis in which the connective tissue elements reverted to their embryonic condition."

Dr. W. B. Hadden regarded the atrophy of the thyroid body part and parcel of the disease, and at the same time held that the sympathetic was affected. He handed to the President a pamphlet he had just received from Professor Heurot, of Rheims, in which there was an account of a case very clearly, from the description, myxedematous, although myxedema was quite unknown to the author. The pamphlet contained several drawings of dissections, showing great enlargement of the sympathetic system, and of the spinal gland and pituitary body, osteophyte growths about the tibia and lower jaw. Dr. John Harley, in replying on the discussion, said that he had not observed the great mental degeneration referred to by Dr. Ord. In the case he had brought forward it was not observable. His view was that myxedema was due to a degeneration of some part of the sympathetic system, and the part in which degeneration could be most easily produced was the thoracic sympathetic."

I have been led to refer so fully to this recent discussion on myxedema and to Dr. Ord's address at Belfast, because everything points to the possibility that we are on the eve of very important discoveries, and of great increase to our knowledge as to the effects of the nervous system on the production and control of disease. The nerve origin of rheumatoid arthritis, the determination of the outbreak of cancer due to nervous influence (a question also recently under discussion); the relation of the sympathetic system with enlargement of the thyroid body in exophthalmic goitre; and again the relation of the sympathetic system with atrophy of the thyroid body in myxedema; all points to a line of thought which is to a great extent engaging the mind of the profession. The consideration of the two latter diseases may lead to some light being thrown upon what is now a very obscure piece of physiology, namely, function and use of the thyroid body.

An interesting feature in the recent Belfast meeting was the presence of a number of delegates from the American Medical Association. Professor Sayre, of New York, gave a demonstration of

the use of his plaster of Paris jackets in the treatment of spinal curvatures. And in the new pharmacological and therapeutical section Dr. Shoemaker, of Philadelphia, gave a demonstration as to the use of the new oleates in the treatment of various skin diseases.

In the same section (that of Pharmacology and Therapeutics) the present condition of the British pharmacopeia was discussed and severely condemned as not being in accord with the present state of medical knowledge. The last issue of the British Pharmacopeia was made in 1867, and an appendix added in 1874 of drugs which had come into habitual use since the first named date. Of course, at the present time there are numerous new drugs which have been brought forward since 1874 and which have survived the ordeal of experiment and have become established as well recognized therapeutical agents and ought now to receive official recognition. Among such drugs might be mentioned the salicylates and jaborandi. It would be of some advantage if it were ordered that the pharmacopeia should be revised from time to time at specified intervals. But whatever course is adopted there are certain to be some who would maintain that the pharmacopeia was incomplete, especially if it did not include their latest introduced pet remedy. It is essential that new drugs should not be hastily thrust into the official catalogue of the nation, and not until they have been duly tried and reported upon by experts and their utility survived the test of actual experience. It was suggested that a committee of the British Medical Association should prepare a list of supplementary drugs that it was thought advisable, should be added from time to time to the pharmacopeia, and invite reports and evidence from members of the association as to their properties and merits before they were actually incorporated. In the discussion on this point Dr. Shoemaker was invited to explain the mode adopted in the compilation of the American pharmacopeia and to say whether it was considered by the profession in the States as a satisfactory work. It was some consolation to us to hear that the same defects which were so bitterly complained of in this country were, according to Dr. Shoemaker, as apparent and perhaps more loudly denounced on the other side of the Atlantic. Another subject which engaged the attention of this new and active section was the Patent Medicine Stamp Act, which has lately been most rigidly enforced. It imposes a tax upon all medicine made up and introduced into this country, as well as all nostrums,

specifics, and medicines sold in this country as proprietary articles, the composition of which is not published. This act presses heavily especially upon the numerous enterprising American firms who are flooding this country with innumerable therapeutical combinations which are advertised as specifics for every ill that flesh is heir to. Only crude drugs are exempted. A simple liquid extract comes under the head of those articles which are taxed. With a view to remedying this evil the following resolution was passed:

"That, in the opinion of the Section of Pharmacology and Therapeutics of the British Medical Association, it is highly desirable that the Patent Medicine Stamp Act should be repealed, for the following reasons:

1. It is unjust to impose a tax on medicine.
2. The act as recently interpreted promises greatly to impede the importation and use, especially in hospital practice, of medicines of foreign origin.
3. The government label issued under the Stamp Act is taken advantage of by patent medicine manufacturers to give the appearance of government indorsement to their productions and lead the public to suppose that the properties of the medicines are sanctioned by authority."

In this section also Dr. Hughes Bennett, of the Westminster Hospital, and Dr. Steavenson of Bartholomew's Hospital, opened a discussion on the Therapeutical Applications of Electricity; and many of the most recent improvements in electrical appliances were exhibited.

At a recent meeting of the Royal College of Physicians of London the President stated that he had entered into communication with the Local Government Board, with a view to ascertain whether the College could render assistance to the Board in case of an outbreak of cholera in England. A reply had been received requesting the College to draw up general instructions for the guidance of non-medical persons in the event of such an outbreak. A numerous and influential committee was named for this purpose.

At the commencement of this month the following circular upon the precautions to be adopted in the event of an outbreak of cholera in this country, was issued:

"The Royal College of Physicians of London, feeling that in the event of the occurrence of epidemic cholera in England the public may properly look to them for advice and guidance, deem it to be their duty to issue the following instructions. These instruc-

tions are not intended to supersede the necessity of immediate medical assistance, or to impose any authoritative restrictions on medical practitioners. The college would, above all things, earnestly impress upon every person the extreme value and importance of sanitary measures in preventing the invasion and limiting the spread of the epidemic. Large experience has shown that nothing is of more importance than to secure a due supply of pure water, and to prevent all possibility of its contamination with sewage or impurities derived from other sources. Free ventilation, avoidance of overcrowding, great cleanliness, and thorough drainage, in towns, villages, and dwellings, are also of urgent necessity. The local sanitary authorities or their medical officer should be consulted on such questions. Excess in eating or drinking or long fasting should be avoided. The moderate use of all cooked vegetables, as well as of animal food, is recommended, and, in general, such a plan of diet as each individual has learnt by experience to be most conducive to his health; for any considerable change in the diet to which the person had been accustomed is seldom advisable during the prevalence of an epidemic. Milk and also drinking water should be boiled. The vessels used for the storage of food or drink should be cleansed with boiling water. Raw vegetables and unripe or unsound fruit should not be eaten. Exhaustion from fatigue, long watching, or deficiency of food, and exposure to cold and damp render persons especially liable to cholera. The college would, therefore, urge the necessity of supplying those in need with food, fuel, and clothing. Persons engaged about those affected with cholera are not, with proper precautions, more liable than others to the disease. The fear of direct infection may, therefore, be practically disregarded; but it is absolutely necessary that some one or other of the ordinary disinfectants, such as carbolic acid, should be applied abundantly to the excretions, soiled linen, and utensils, before these are removed from the apartments of the sick. Extreme cleanliness and disinfection of the discharges from the stomach and bowels cannot be too much insisted upon, as it is generally believed that the disease is disseminated through these. The college would earnestly insist upon the importance of organizing, in any district infected by cholera, the system of house-to-house visitation, and of establishing temporary hospitals for the reception of patients who cannot be properly treated in their own houses. The college would further suggest that such temporary hospitals should be numerous rather than large, and so

distributed as to make it unnecessary to convey to any great distance those who are stricken by the disease. Ambulances and stretchers for the removal of the sick should be provided. During the prevalence of cholera, any unusual degree of looseness of the bowels, though painless, should not be neglected, and on its occurrence the patient should immediately go to bed, be kept warm, and medical advice be at once obtained. Previously to the arrival of a medical attendant, any of the medicines used at other times for checking common diarrhea may be taken, such as the chalk mixture or the compound cinamon powder.”

E. V. A.

OBITUARY.

JOSEPH JANVIER WOODWARD, M. D.,

Joseph Janvier Woodward, M. D., Major and brevet Lt. Colonel in the United States Army, died near Philadelphia, Pa., Aug. 18, æt. 52. He pursued his preliminary and medical studies in that city, graduating from the Medical Department of the University of Pennsylvania in 1853. He engaged in the practice of medicine there until August 1861, when he was appointed assistant surgeon in the regular army. He served during the war with credit and distinction both as an officer and physician.

In 1866 he was assigned to the duty of editing the “Medical and Surgical History of the War of the Rebellion,” and to him is due very much of the value of that work:

During his active service he made some valuable studies on camp dysentery, and on typho-malarial fever, which last he was the first to describe and differentiate.

Having given much study to the use of the microscope in disease before entering the army, he continued his researches in that department of professional study and with such ability and success that he gained a world-wide reputation as a microscopist and photo-micro-grapher.

Dr. Woodward was an earnest and indefatigable worker, and in his death not only the army medical department but the whole American profession has lost one who was an honor to it and one who still in the prime of life was working faithfully for its best interests.

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ORIGINAL ARTICLES.

DEGENERATION THE LAW OF DISEASE.

BY L. A. MERRIAM, M. D., OMAHA, NEB., *Professor of the Principles and Practice of Medicine in the University of Nebraska, College of Medicine, Lincoln, Neb.*

[Read before the Douglas Co. Med. Society at Omaha, Sept. 2, 1884.]

WHETHER we accept the law of evolution as given to us by its great apostle Herbert Spencer and his followers as true in all its details or not, its general principles we must admit, for they are incontrovertible and have been accepted by the best scientific men of the time, and we must also admit that it is, to say the least, like the law of gravitation, the best working hypothesis extant. It embraces all the phenomena of the universe in its threefold character of:

1. Those changes seen in all departments of nature, whether physical, chemical, biological or sociological in which the structure changes from a lower to a higher or more fully developed form, from the simple to the complex, from the homogeneous to the heterogeneous, and definitely described by E. Ray Lancaster as the law of elaboration or the law of progress, or perhaps better defined as those changes which take place in the evolution or development of the embryo while passing from its first beginnings through its pre-natal existence and youth to full maturity.

2. Those changes, typical examples of which may be seen everywhere in nature, in which though constantly undergoing change the resulting product seems to maintain the same form, exactly fitted to its conditions and maintained as it were in a state of balance. This is known and described as the law of balance. As examples of this we may mention among living forms the lowest types of animal life at present existing, such as the microscopic animalcules, the amebæ and infusoria, the simpler living mollusca or shellfish, some of the simpler vertebrates and worms.

3. Those changes from a higher to a lower form, from the complex to the simple, from the heterogeneous to the homogeneous, in which the organism becomes adapted to less varied and less complex conditions of life, in which there is suppression of form corresponding to the cessation of work. Dr. Dohrn of Naples has named this the law of degeneration, and it is found to have a wide application in explaining existing forms of life and pathological processes. Elaboration of some one organ may be a necessary accompaniment of degeneration in some or all the others. In fact this is very generally the case, and it is only when the total result of the elaboration of some organs and the degeneration of others is such as to leave the whole animal in a lower condition, that is, fitted to less complex action and reaction in regard to its surroundings than was the ancestral form with which we are comparing it (either actually or in imagination), that we speak of that animal or plant as an example of degeneration.

But we speak of degeneration of parts of an animal or plant in cases even where the organism as a whole may be spoken of as an example of elaboration; and pathology deals with these varying, complicated, fluctuating, morbid processes of rapid or slow development with improvement or relapses so that processes of degeneration and regeneration are mingled with one another instead of developing in a regular series; and manifold lesions affecting only parts of the nerves and muscles in varying combination may occur.

Naturalists have long recognized parasites of all kinds as instances of degeneration, and there are many lizard-like animals

which show a gradual loss of limbs, a local or limited degeneration. The common lizard (*Lacerta*) with its five toes has degenerate relatives in seps and bipes in which the limbs have entirely vanished or preserve only rudimentary forms.

The paleontological history of the horse shows an elaboration of type but a local atrophy or degeneration in the feet from five digits to one digit, its present form. Other illustrations of general and local degeneration will readily occur to the reader, for the whole field of comparative anatomy and embryology is full of them and this law of degeneration clearly explains many vegetable phenomena otherwise inexplicable.

In tracing the growth and decay of languages, nations, societies, philosophies and religions we perceive everywhere the laws of elaboration, balance and degeneration exemplified.

But it is particularly with reference to the law of degeneration and its relation to pathology that I write. Those anatomical or histological changes brought about by any new set of conditions that surround a plant or animal, when of such a character as to transform the organism or any parts of it, to a lower or more degenerate form follow, in many cases, if not in all, in an inverse order the same steps that occurred during the elaboration or embryonic growth of the structure.

So long as this degeneration of organs or tissues is so gradual that the system at large is able to adapt itself to the new conditions, no physiological inharmony results. But when, because of changed and sudden influences, certain organs or tissues degenerate or revert towards their embryonic form more rapidly than the general system can follow, then physiological inharmony results and we have perverted physiological action; in other words, we have disease. Not that degeneration either general or local is disease, but that degeneration is the generic term of which disease is but a part; or, to put it more logically, some degeneration is disease, all disease is degeneration or a reversion of structure towards the embryonic condition.

In this law of degeneration, which is but a part of the great law of evolution, we expect to find the solution of many an intricate problem that now vexes the pathologist and practical physician. The recognition of this law as applying to pathology

is to my mind one of the grandest steps of progress in the art of healing that has been made for many a day.

You may say this is but an hypothesis, and so it is, but it harmonizes more facts than any other and hence becomes a very probable hypothesis, almost ceasing to be hypothetical; and its high probability causes it to be regarded as a law. That it will be verified by the observations and experiments of many workers in the field of pathology I verily believe.

Without attempting a demonstration of this law, nor promising to answer all questions that may arise, I present the subject for careful consideration, and briefly consider a few facts corroborative of its truth.

The mature body is not a numerical accumulation of cells; it is one complex mass of living matter, and one of its phases is its reticular arrangement of protoplasm (or bioplasm) in the meshes of which may be found the non-living matter. We may never be able to solve the mystery that surrounds this living matter, nor even to scan it deeply from a chemical standpoint, but we know some parts of it are much more highly differentiated than others, and we also know that the most highly differentiated is the least stable and hence the most liable to disease.

Degeneration may be seen in non-living matter, but that only which is alive can become the subject of disease. Hence there can be but one pathology and that is the pathology of living matter.

Before divided nerves, muscles, bones, or any of the tissues can begin the process of repair, the edges, ends or parts so severed must undergo the change from living matter of a higher type to living matter of a lower type; in other words, it must first return to the embryonic condition before repair begins. From this point it is a process of elaboration and restoration of forms and functions in accordance with developmental processes and the law of evolution. There is degeneration here, but it is not necessarily disease. Inflammation enters so largely as a factor in disease that it is worth our while to gather a few facts touching upon this question.

Two features characterize inflammation, viz.,

1. An active hyperemia.
2. An active tissue metamorphosis.

In active hyperemia the arteries, veins and capillaries become dilated, because the stimulus which causes them to contract has ceased to act or has become diminished, and the traumatic agency or influence has induced an impaired function of the special nerves of that part definitely known as the vaso-motor nerves.

That this impaired function of the nerves is a degeneration may be seen by recalling Spencer's well-known law of development, viz., "When a wave of molecular transformation passes through a nerve there is wrought in the structure of that nerve such a change that a like succeeding wave will pass through with greater facility than its predecessor."

The converse of this law must be equally true, viz., "When a wave of molecular transformation passes through a nerve with less facility than the preceding wave, there has been wrought in the structure of that nerve a change from a higher to a lower organization, and this is at least a temporary degeneration. Corroborative of this view are the recent developments of the so called "degeneration reaction" soon to be explained.

The cardinal symptoms of inflammation, redness and heat, not always being present, should be discarded as inaccurate, for when present both are fully explained by the active hyperemia, the redness by the increased quantity of red blood corpuscles and the heat by the accelerated blood current. That any of the heat is caused by degenerative tissue metamorphosis prior to the death of the tissue, *i. e.*, while the tissue is returning to the juvenile condition, is doubtful, for the temperature of the inflamed part is never higher than the temperature of the general blood circulation, and the elevation of temperature in inflammatory fevers is caused by the absorption of decomposing pus.

Pain, swelling and impaired function are explicable only on the hypothesis of tissue metamorphosis. Pain is accounted for by some tissues being more sensitive in the embryonic condition than in a mature state and also because of the swollen parts and the partial rupture or laceration of minute filaments of nerves. Pain and swelling, however, are not always present in inflammation. The swelling from infiltration and enlargement of the

cells is indicative of a more youthful condition of the tissues.

In the early beginnings of the embryo we see scarcely anything but cells separated by narrow traces of intermediate or basis substance. The older the tissue becomes the broader are the traces of intermediate or basis substance and the more slender are the cells and their processes. The reverse takes place in inflammation. The more advanced is the process of inflammation, the larger do the bodies of the cells and their processes become, and the smaller are the islands of basis substance which fill up the meshes of the network. This inflammatory infiltration and enlargement of the cells is preparatory to either the regeneration of the tissues, or it may be to their disintegration to pus.

This local disturbance, so retrogressive or degenerative in its character, and termed inflammation, has for its object not only the repair of the injury but the removal from the organism of those locally injurious influences that may have wrought or may persist in keeping up the inflammation. And without going into a detailed argument of a proposition so well known, it should be only necessary to state that all of the processes or changes of tissue that occur in inflammation are first degenerative; and when repair takes place they then become elaborated into their appropriate structure. The forms of degeneration which may accompany inflammation are various; they vary with the nature of the exciting cause and with the intensity of the inflammation, with the character and extent of the vascular disturbance and with the nature of the tissue. And when we take into consideration the great field of disease into which the inflammatory process enters as a factor, the value of the degeneration hypothesis is clearly seen.

With all due respect for the memory and the achievements of the great Cohnheim, it seems to me that his theory of the origin of neoplasm in "embryonic remains" must give place to one more true to nature. That nerve influence and local irritations do enter largely into the causes of neoplasms no one will be so rash as to deny. The epithelioma of scars, of the scrotum in sweeps and of the arm in paraffin workers and other instances forbid the idea of "embryonic remains." But they do show

that nature in response to known irritations or unknown influences proves herself true to the law that before one tissue can be transformed into another it must first return to the embryonal or juvenile condition, and the law of Virchow is proven true, that "the cellular elements of a tumor are derived from the pre-existing cells of the organism." There is no way of proving that these cells are "embryonic remains," but evidence is accumulating to show that the nerves known as the regulators of the nutritive functions and which connect the different parts of the same living organism with a common centre, have become impaired, as the experiments of Schroeder von der Kolk and others seem to verify.

The various forms of infiltration and degeneration, such as fatty, mucoid, colloid, calcareous, and pigmentary, are but the results of changed and imperfect nervous supply and a failure on their part to perform their normal action. This imperfect performance of nerve function is a diminished capacity for work and involves a change in the structure of the nerve, perhaps not discernible by any means at our command, but nevertheless still existing. These changes in function, and hence in structure, are retrogressive in character, and hence conform to our definition of degeneration as the third part of the law of evolution.

In many other diseases, particularly in the field of nervous and mental troubles, these reserved or degenerative changes have been clearly traced. The axis cylinder of Purkinje and the white substance of Schwann become one homogeneous protoplasmic mass, the multiformity of the caudate cells with numerous processes changes to the uniformity of the round cells destitute of processes, while the medullary sheath soon blends also with this simple and uniform product. With this change of structure we observe a corresponding loss of function, and the complex movements seen in health become difficult or impossible. This is a change in the structure and function from the higher to the lower, from the complex to the simple, and is in conformity to the law of dissolution otherwise known as the law of degeneration. Not that all diseases clearly exhibit this law, for many are so rapid that the law cannot be traced, yet even in these glimpses of the law may be obtained. Parallel

with the changes in the nerves are analogous histological changes in the muscles, glands, organs or parts supplied by them.

Experimental and clinical investigations have proven that these degenerative changes are characterized in the main by diminution and loss of the faradic and galvanic irritability of the nerves, and the faradic irritability of the muscles, and this loss of power demonstrated by electricity is characterized as "degeneration reaction." It follows, therefore, that wherever degeneration reaction is found to exist, there is degeneration, and its extent and quality may be largely determined by the degree of disturbance in the electrical conduction. A slight depression of faradic and galvanic irritability occurs in the nerves in comparatively mild diseases and disappears with relative rapidity. In these cases it is probable that the nerve is very slightly or only temporarily degenerated.

Many other illustrations of the truth of this law of dissolution or, as others have called it, the law of degeneration, could be presented did time permit. That it is the great law that regulates the phenomena of all diseases we have abundant reason to believe. Whether it should be termed the law of degeneration, as I believe, or the law of dissolution, or the law of retrograde metamorphosis, may be a question to be decided. But whatever terms are used the facts remain incontrovertible. There are many unanswered questions in pathology and physiological therapeutics that I believe a better knowledge of this law will help us to solve.

What means the natural period of the duration of some diseases?

May it not be the time necessary for the parts affected to revert to their embryonic type and for resolution to begin? Perhaps it will prove to be in pathology what Ohm's law is in electricity. We can wander as far as we will into the fields of electricity and we need never get lost so long as we keep definitely in mind this guiding principle. So with the law of degeneration as the guiding star in the study of disease, we launch out to explore the unknown fields of pathology, retracing every step in accordance with the truths taught in embryology.

NOTE ON IMPAIRED OR LOST QUADRICEPS
TENDON AND CREMASTERIC REFLEX AS
AN ASSOCIATED SYMPTOM OF
GENITAL NEURATROPHIA.

BY C. H. HUGHES, M. D., *Lecturer on Psychiatry and Neurology,
St. Louis Medical College, Editor of the Alienist and Neurologist, Etc.*

I HAVE already, in previous communications on the subject of the diagnostic significance of patellar tendon reflex, made known the fact that it was *not absent but lost patellar tendon reflex* that is the *significant sign in locomotor ataxia* (vide *N. Y. Med. Jour.*), and in 1880 I discussed the association of this sign in other morbid conditions than posterior spinal sclerosis and in certain obtunded conditions of the cerebro-spinal centres brought about by medicinal impressions (vide *Alienist and Neurologist*, Vol. I, No. II).

The purpose of the present note is to call attention to a fact which I have not seen noted by others, and which I have I think recorded with sufficient emphasis, and that is, that in most, if not in all, of the cases of sexual neuratrophia in which exhaustion and erectile incapacity has been confessed as an actual fact and not as a mere psychical fear, the impairment of the cremasteric reflex has been notable while the diminution or absence of the normal tendon reflex has been quite marked. To such a degree is there impairment of these physiological signs of ordinary normal central spinal reflex impressibility to peripheral impression that I believe the symptom one of decided value for purposes of differentiation between the real and the psychical lost manhood of sexual exhaustion, as, in certain cases, these impaired reflexes return after long quiescence of the sexual function and desire induced by successful treatment.

Cases of sexual neuratrophia, when they reach the neurologist (within whose therapeutic province they properly belong from the beginning), are generally in a state of general lowered nerve vitality, especially in the psychical area of the cerebral cortex, from the repeated failures of experimental general medicine and nerve

excitant and so-called tonic method, some exhausted patients having been subjected to exhaustive manual and mechanical massage a most pernicious prescription in many cases. But this is not germane.

A detail of cases would not add to the force of the preceding statement and would take more of the writer's time than is now at command.

It will suffice that the reader test all of his cases for himself for the state of these signs. It is somewhat singular that the impairment of the patellar tendon should be more apparent in sexual neuratrophia than the cremasteric reflex.

The use of the static machine makes the difference quite apparent, for while in most cases, the scrotum will draw up more or less effectually under its application direct or to the inner sides of the thigh, the knee jerk will be displayed more tardily and sometimes not at all under its influence or of mechanical tapping, though I have found in absolute and incurable impotency the testes could not be drawn up at all and the tendon reflex at the knee could not be elicited.

There are cases in which a real genital ataxia exists; though I am not yet prepared to prove that it is the rule in true impotency. I only record my suspicions, which wider experience may confirm into a conviction.

The term *neuratrophia*, as employed by the writer, signifies in this connection that condition of the genital and patellar reflex centres in the spinal cord, in which the nerve nutrition is *minus* and the waste *plus* and has continued so long that a condition of *neuron-a-trophe*—neuratrophia or defective nutrition from overtax takes place. Central neuratrophia in the nervous system is the essential condition of abolished or impaired reflexes whether from direct central nerve starvation from deprivation of nutrition or from the changes of sclerosis, the ad-neural depositions of syphilis or the equally effectual pressure of congestion or inflammatory exudation.

Impaired or lost perverted reflexes are physical signs of neuratrophia just as morbid fears and mental inaction are evidences of psychical and general functional neuratrophia which the writer elsewhere discussed (*vide Alienist and Neurologist*, July, 1882).

THE VALUE OF THE THERMOMETER AS A MEANS OF DIAGNOSIS.

BY WM. W. VASSE, M. D., THOMAS HILL, MO.

[*Read before the Moberly District Medical Association, June, 1884.*]

WHOEVER first used the thermometer in clinical investigations conferred a great boon upon humanity and upon the medical profession. I should dislike very much to have to treat a case without a fever thermometer. The old time way of relying upon the sensation communicated to the hand is unreliable and cannot be depended upon, for the temperature of the hand is variable. Some have naturally cold hands; and while the patient's temperature might be normal it would still impart to the hand of such a sensation of heat which would lead him astray.

Others' hands are preternaturally warm and they again would be led astray, for the surface of the patient might appear to the hand a little cool when, in point of fact, it would be normal.

It will not do to rely upon the patient's sensations for they are more fallacious and unreliable than the sensation produced to the physician's hand. They often complain of heat, when the temperature shows none, and how often do we see patients complain of being cold and chilly and repudiate the idea that they have fever, when the thermometer will register at 100° to 103° !

Then it will not do to rely upon the appearance of the patient, for at times the face is red and flushed; he cannot bear much covering, wants the door opened occasionally to get a good breath; pulse is quick, 90 to 100, and you readily conclude that the patient has fever, and unless you are very guarded in your opinion you so express yourself to the family or friends. To make the opinion sure you bring the thermometer to bear on the case, and oftentimes to your astonishment, you find the temperature normal and sometimes below normal. What

would we do in a case of this kind without a thermometer? Could we make a correct diagnosis? Nay, verily, and if the diagnosis is wrong the treatment is wrong also.

Neither can we rely upon the pulse as an indicator of a rise of temperature; it is very unreliable, cannot be depended upon. For instance, we have cases where the pulse only beats 56 to the minute and the temperature runs up to 102° ; on the other hand we have cases where the pulse beats 100 and the temperature is normal, and such cases are not unusual, but occur so often that we cannot rely upon the pulse as an indicator of temperature; neither does it always indicate the gravity or serious nature of the disease we are called to treat so well as the thermometer does. At the risk of being a little tedious I will give the record of several cases to illustrate my points.

CASE I. Mrs. Sarah A. W— was taken sick July 27, 1883, with remittent fever complicated with bronchitis, afterwards with pneumonia in both lungs. I made the following record of the case:

	PULSE.	TEMP.	RESP.		PULSE.	TEMP.	RESP.
July.				August.			
27 a. m.				8	98	100.8	
28 a. m.				9	88	100.6	
28 p. m.	80	104		11	88	100	
29 a. m.	80	101.6		12	75	99.4	
30	80	100.8		13	70	99.6	44
31	90	102.6		14	95	101.6	48
August.				15	80	100.4	40
1	90	101.4		16	80	100.4	40
2	90	101.6		17	80	101.4	
3	94	100.8		18	90	101.4	
4	110	101.8		19	80	100.4	36
5	110	100.6		20	76	99.6	
6	108	100.8		21	72	99.6	32
7	110	102.4		22	66	99.2	34

Patient Discharged.

The first two visits I kept no record.

On the night of the 28th her pulse is only 80 to the minute, and the temperature 104° , high enough for the pulse to be 120, or 130 to the minute, and at no time in the case was the pulse above 110 to the minute, and on August 13 we find the pulse only 70 to the minute, a little below the average normal pulse; and without the thermometer we would say no fever that day, but thermometer registers 99.6°

CASE II. 1883, Mr. R. H. Intermittent fever complicated with bronchitis.

August.	TIME.	PULSE.	TEMP.	AUGUST.	TIME.	PULSE.	TEMP.
15	5 p. m.	80	102.8	24	7 p. m.	88	104
16	8 a. m.	60	100	25	4:30 p. m.	80	102.2
17	10:30 a. m.	70	100.2	26	9 a. m.	72	99.6
18	4 p. m.	80	102.4	27	10:30 a. m.	66	99
19	2 p. m.	70	100.8	28	5 p. m.	88	102.4
20	9 a. m.	74	99.8	30	10 a. m.	70	98
21	8 a. m.	74	100.6	Sep.			
22	11 a. m.	74	100.6	1	8:30 a. m.	74	98.6
23	10:30 a. m.	74	99.4	3	4:30 p. m.	74	99.4

Patient Discharged.

In this case we find on the morning of August 16 the pulse was only 60 to the minute, while the temperature was 100° ; on August 19 in the afternoon we find the pulse only 70 to the minute and temperature 100.8° and on August 20, in the morning the pulse is 74 to the minute, four beats faster than it was the day before, and the temperature is 99.8° ; one degree lower than it was the day before, so without the thermometer we should have concluded that the fever was higher, when in fact it was lower. On the morning of August 21, we find that the pulse is the same, but the temperature is 100.6° , nearly one degree higher; on August 24, at 7 P.M., the pulse is 88 to the minute and the temperature is 104° ; the pulse is only 14 beats faster than it was on the morning of August 23, and yet there is a rise of four and three-fifths degrees of temperature. At no time in this case did the pulse go above 88 beats to the minute, and yet the temperature as high as 104° .

CASE III. 1883, Richard W—, aged about 16, remittent fever complicated with bronchitis and pneumonia, was visited first August 30, 1883.

Aug.	TIME.	PULSE.	TEMP.	RESP.	Sep.	TIME.	PULSE.	TEMP.	RESP.
30	11 a. m.	110	103.8	30	6	9:30 a. m.	60	99.4	30
31	9 a. m.	80	100.4	.....	7	3 p. m.	80	100.6	30
Sep.					8	5 p. m.	60	99.6	30
1	9 a. m.	60	99.4	22	10	10:30 a. m.	66	99.4	28
3	3 p. m.	90	103.8	30	12	9 a. m.	74	99.2	28
4	11 a. m.	72	99.4	32					

Patient Discharged.

In this case we find that on the morning of August 30, the pulse is 110 beats to the minute and the temperature is 103.8° . September 1, we find that the pulse is only 60 beats to the minute and temperature 99.4° ; had we no thermometer we would readily conclude that there was no fever and that our services would not be needed any longer, but the thermometer registers 99.4° .

On September 3, in the afternoon we find his pulse 90 to the minute and his temperature 103.8° : twenty pulsations slower than it was on August 30, and yet the temperature the same. On September 8, at 5 o'clock p. m.: pulse is only 60 to the minute, twelve beats slower than the average normal pulse, and yet the thermometer shows a temperature of 99.6°

CASE IV. J. R.— was taken sick September 6, 1883, with remittent fever. I was called to see him September 12, 1883. I made the following record of his case:

Sept.	TIME.	PULSE.	TEMP.	RESP.	Sept.	TIME.	PULSE.	TEMP.	RESP.
12	11 a. m.	62	100.4	22	15	6 p. m.	58	101	20
13	9:30 a. m.	70	99.6	20	17	4 p. m.	56	102	22
13	5 p. m.	66	102.4	24	19	3 p. m.	50	99.6	22
14	11 a. m.	66	100.4	20	21	11 a. m.	50	98	22

Patient Discharged.

This case is remarkable for the unusual slowness of the pulse, and the absence of any surface heat as imparted to the hand, the patient expressing himself as not having any fever. He had examined his own pulse and found that it was quite slow and he did not feel any too warm or but very little, and he concluded of course that he did not have any fever; but he could not go around, had no appetite, could not sleep much and had bad dreams. He treated himself for five days without any improvement; he sent for me on September 12; I found the pulse 62 to the minute and temperature 100.4° ; on the morning of September 13 at 9.30 o'clock a. m. the pulse was 70 to the minute, the highest point reached during his sickness, and the temperature was nearly one degree lower than it was the day before. At 5 p. m. of the same day the pulse dropped to 66 to the minute and the temperature rose to 102.4° ; on September 15, the pulse at 6 o'clock p. m. is 58 to the minute and temperature 101° ; on September 17, at 4 p. m., the pulse is 56 to the minute, two pulsations slower than it was the day before, and yet the temperature is 102° ; one degree higher than it was the day before when the pulse was two beats faster. No heart trouble that I can discover.

CASE V. M. S.— had been sick about a week, I made the following record of his case. Diagnosis, remittent fever:

Oct.	TIME.	PULSE.	TEMP.	RESP.	Oct.	TIME.	PULSE.	TEMP.	RESP.
11	5 p. m.	78	102	.....	21	4 p. m.	80	103	28
13	10:30 a. m.	70	101.6	22	23	5 p. m.	76	101.6	26
15	10 a. m.	72	100.8	16	25	4 p. m.	72	100	18
17	12 m.	66	100.6	18	27	1 p. m.	72	98.4	24
19	10:30 a. m.	70	101	18					

Patient Discharged.

This patient was a young man aged about 22 or 23 years. He was first seen by a brother practitioner several days before I saw him. He examined him carefully and told him he was not much sick, rather joked him for thinking he was sick, prescribed some simple remedy and dismissed him. As there was no improvement, but complete anorexia, inability to sit up, restlessness and insomnia, he could but think there was something the matter. He sent for me October 11; I saw him at 5 P. M. I examined him carefully; there was no surface heat apparent to my hand, neither did the surface seem cool; there was no cough, no pain, other symptoms as mentioned before, pulse only 78 to the minute no fuller or stronger than you would usually find in a vigorous young man of that age. Now, last but not least, I bring the thermometer to bear on the case and to my surprise it registers 102° under the tongue. That settles the matter; we know now, why he can't go about and attend to his business affairs. Had my brother practitioner used a thermometer, he would not have dismissed the case, which continued for seventeen days after I took charge of it.

On October 13, at 10:30; A. M. we find his pulse 70 to the minute and yet his temperature 101.6° ; on October 15, at 10 A. M. the pulse is 72, two beats faster than at the previous visit, yet the temperature is nearly one degree lower; at the next visit on October 17, at 12 M., the pulse is only 66 but the thermometer registers 100.6° ; on October 21, at 4 P. M. we find his pulse up to 80; the highest point reached during the case, and the temperature 103° ; high enough for the pulse to be 120 to 130 to the minute. Perhaps some would say that he had an abnormally slow pulse but the record shows the contrary; for on October 27, at 1 P. M. the pulse is 72 and the thermometer 98.4° ; patient a great deal better, has a good appetite sits up, and sleeps well. Patient dismissed.

Other cases might be given, but this will suffice for this paper.

RECAPITULATION

In diagnosing animal heat, we find that it will not do to rely upon sensation as communicated to the hand of the physician or as experienced and set forth by the patient; nor will the appearance of the patient do to rely upon, neither will the pulse, nor will all these symptoms taken together do to rely upon, for I have had cases of pregnancy that had all of these symptoms and still there was no rise of temperature as determined by the thermometer the only sure means of determining animal heat; and the physician that ignores the thermometer neglects one of the best and surest means of diagnosis. I well remember cases, that I have been put to my wit's end to determine whether they had fever or not, before the advent of the thermometer in clinical investigations.

Some one has said, that "Ignorance was bliss" and *it was folly to be wise* and physicians that ignore the use of the thermometer in clinical investigations are living in blissful ignorance of the value of this little instrument as necessary to form a correct diagnosis, and as his treatment is predicated upon his diagnosis, it is all important to his patient's welfare and to his own success that he forms a correct diagnosis, that he may predicate an appropriate treatment, and without the thermometer he cannot do it.

ENTERO-COLITIS.

BY J. H. PETTY, M. D.

[Read before the Moberly District Medical Association, June, 1884.]

ENTERO-COLITIS is peculiarly a disease of the summer months in this latitude, and is frequently called summer diarrhea of children from a single symptom.

Children of eighteen months of age and younger are more likely to be affected than those that are older.

The predisposing causes of entero-colitis are unwholesome diet, damp and badly ventilated rooms, sleeping apartments particularly, breathing a foul or vitiated atmosphere, poisonous

gases, etc., and indeed any cause that tends to lower the vitality of the child, or prevent its being sufficiently nourished.

The exciting cause, which may be also the predisposing cause, indeed the chief factor in producing the disease, is long protracted atmospheric heat continuing day and night.

We may have a succession of extreme hot days, but as long as we have cool nights so that children may sleep quietly and pleasantly, we are seldom called to see a patient with this disease; but when the weather becomes extremely hot during the day with nights that are equally or nearly as hot, so that children when they go to sleep perspire freely for hours at a time, toss from side to side, from place to place upon their beds as though they were in quest of a cooler spot, and from the excessive loss of fluids from the system by perspiration, become thirsty and restless, and awake next morning unrefreshed, and have to go through the same ordeal perhaps for weeks, then it is this disease becomes rife; and it is no uncommon thing to find all the small children of an entire community stricken down at the same time.

This disease should not be confounded with cholera infantum, though both are diseases of hot weather, and entero-colitis is sometimes a sequel to cholera infantum; and all of the old authors that I have examined make no distinction between them. What we of the present day term entero-colitis, the old authors call a chronic form of cholera infantum; but I presume there is no observer of the present day that regards the two diseases as identical.

I will pass over the symptomatology of the disease, except so far as it may be referred to in speaking of the treatment, as I desire to be very brief in this paper.

For this disease we have a great many medicines recommended and tried; but we find in this case as well as all others "in the multitude of medicines there are but few remedies."

Attention to the diet is all important. As the stomach does not act promptly while the child is sick; all food that is not digested is likely to ferment. Such articles as are known to take on the fermentative process most readily should be avoided. An unusual amount of water, or other fluids should not be allowed,

yet it is important that the patient should have a reasonable quantity of water, and if the mouth is very hot and dry, small lumps of ice may be inclosed in a thin gauze and held in the the mouth from time to time to keep its mouth and tongue cool, but the swallowing of ice water should not be allowed.

When we examine our text-books, we find them all recommending about the same things and placing no definite reliance on any particular drug or course of treatment; and when the usual remedies have been tried and no relief obtained we are told, "The child must be sent to the country," as though the disease could not or at least did not prevail in the country.

I suppose if we could send them all to a mountainous country where they always have cool nights it would be very beneficial, but we cannot always send them to a mountainous country. Still there is of course some benefit to be derived from a country residence, as the air is purer than it is in the city.

Alkalies and anodynes have a very salutary effect in relieving some of the prominent symptoms. Anodynes relieve pain and alkalies neutralize acids and relieve flatulence. Carbonate of soda and some of the preparations of opium I deem best of this class of remedies.

Small quantities of carbolic acid mixed with glycerine given from time to time will prevent the food from undergoing the fermentative process.

The only remedy that I have tried that has a reliable curative effect is the fluid extract of ergot given at regular intervals and in small doses, for a child twelve months old, fifteen drops every three or four hours. This with proper hygienic surroundings and judicious alimentation will relieve a very large majority of cases. Do not understand me that I regard this as a specific. We have no specifics in medicines for anything.

Ergot not only exerts a curative effect on the disease but prevents some of those fatal complications that arise, such as spurious hydrocephalus. Many years ago I witnessed the death of several children who had been suffering with entero-colitis, who died of brain trouble, which arose just as we were beginning to congratulate ourselves that the trouble in the bowels was getting well. This with very rare exceptions has not been the termination of cases treated with ergot.

Ergot appears to have a quieting effect on the nervous system and being also a powerful capillary astringent tones up the vascular system, prevents effusion of serum into any part of the cranial cavity.

I believe the course of treatment here indicated to be rational. I have tried it for the last few years and the result has so far been very satisfactory.

ERYSIPELAS.

BY DR. J. W. DREYFUS, LOUISIANA, MO.

[*Read before the Louisiana Mo., Medical Society, Sept. 24, 1884.*]

TO most profitably investigate the disease under consideration would doubtless be to consider the points as they practically and naturally occur to us in our own deliberations on the subject.

Adopting this view I have seen fit, therefore, to consider first the nature of this affection. In discussing diseases it is necessary always to keep prominently in view certain fundamental principles or laws of nature, and notably the tendency of all disease to cure without a single exception. This implies a certain method or methods that is or are inexorable and uniformly present and active in this or that affection, depending certainly and invariably upon the peculiar morbid action at hand; and therefore much that we have heretofore regarded from a pathological standpoint might have been, perhaps, more accurately interpreted and definitely understood, had we given due consideration to this great conservative principle of nature.

For example, if the exterior of the body be subjected to a sudden severe chilling, we have as a consequence a congestion of the corium or sub-connective tissue, resulting in the so-called "cold." Here the offence is given through the skin and its emunctories, and it is through the skin and its emunctories that the most ready restitution is offered.

Again typhoid fever expends itself uniformly on the bowels, not because the bowel primarily invited disease, but simply because from a co-operation of certain agencies it becomes an essential and important condition of the disease. And therefore I hold that erysipelas, not unlike the other exanthemata, involves the skin not from any mere choice or predilection for that organ, but because of a fixed and absolute condition peculiar to that class of diseases. And when we consider the vastness of the skin and its appendices as a depurating, respiratory, absorbent and sensory organ, it is not so difficult after all to perceive the wisdom of nature in the selection of so faithful and efficient a servant in so important a service as to become the central figure in the eliminating process of the poisons peculiar to this class of diseases.

It is maintained, therefore, that this is an affection essentially systemic in character, having for its local phenomena certain peculiar symptoms, viz., inflammation, exudation and sometimes suppuration of the skin and alveolar tissue, but that these local manifestations are peculiar to this affection in so far only as pertains to a just relationship of cause and effect.

Our next step will be in the direction of the origin of this disease. It is defined at length in our text books as an acute specific disease characterized by a fever of low type and a peculiar inflammation of the skin, whose tendency is to spread over the surface of the body, induce serous infiltration and suppuration of the skin and areolar tissue, to affect the lymphatic glands and lymphatics, and to cause serous exudation between the cutis and cuticle. Now, it must be confessed that our information on this subject from this alone would be very meagre indeed as to the special origin of the affection. In other words, if we are to understand that this is an affection characterized by certain peculiar manifestations, certain inquiries intrude themselves as to the absolute evidence of the existence of any specificity whatever, as no one will dare assert its specific character, on the bare fact of its inflammatory character. It does not reside in the fact that it is a disease that affects the skin. Nor can it be shown abstractly that it is due to the fact of its tendency to exudation and infiltration of the areolar tissue, and yet it must be

admitted that this is an affection *per se* characterized by certain special features that argue specificity.

What, then, constitutes its primal conditions. Unfortunately for us in our endeavors to analyze or reach the primal conditions of a given disease, those efforts are of necessity confined largely to the domain of speculative induction, and therefore of necessity our results must always be of somewhat doubtful value.

However, the latest researches of hematologists must command certain esteem of every thoughtful gentleman, in that much that has heretofore served to complicate and add darkness to obscurity has through the untiring efforts of these gentlemen, become the brightest rays that illumine our pathway in this direction, and without farther consumption of time it is sufficient to state that, from the present light on the subject, we are warranted in believing that all diseases characterized by special features especially (by which we mean specific character) have for their primitive conditions certain metamorphic changes that occur somewhere in the circulating fluids, and doubtless of hemic origin, and that those changes, if not at once endowed with specific character, are at least susceptible of farther proliferation or elaboration, which ultimately through the co-operation of other agencies determine their specific character and destiny.

I mean to say that this affection, or that affection, characterized by specific phenomena, require for their establishment certain intrinsic and extrinsic conditions occurring within and without respectively, and a consideration of this at once brings us face to face with the means of propagation; and now while we have seen that it is not improbable that the germinal elements of this disease are furnished through certain inherent changes in the blood, it is yet difficult to understand what determines those changes. In other words we realize the necessity of certain other factors or correlative circumstances in order to adequately comprehend the situation.

Upon this point it is obvious that but little can be said, however desirable the information.

But fortunately we are not without some data that tend somewhat to elucidate the facts in this connection.

Occupying a conspicuous place in this category is the well substantiated fact of the peculiar susceptibility to the disease of certain individuals over others, due to a predisposition by virtue of family heredity, and I shall not stop here to argue the distinction that may or may not exist between causes primary and derivative. I am aware that in a strict sense a predisposition to any disease, simply places that circumstance in the rank of a primary sequence and in no wise an exciting cause, yet I have seen fit in this instance to give it a place among exciting causes from the fact of its prominence and often inseparability from those influences.

Now it has required but little clinical observation to convince any gentleman present that not infrequently we see cases of erysipelas where no possible exciting cause could be appreciable, other than the patient being simply seized, owing to a predisposition. A single example will illustrate this. Take the fact of periodical erysipelas. Even here where we find patients who can look forward to these periodical attacks with as much precision as the hay fever patients look forward for their attacks, no thinking gentleman will assert uncompromisingly that every possible extraneous influence has been eliminated. Yet on the other hand, when every possible precaution is observed dietetic, atmospheric and telluric, it cannot fail to impress us with the fact that by virtue of a predisposition and this alone the disease asserts itself.

I am convinced, however, that perhaps in the vast majority of cases (though unappreciable) there are always active efficient causes, and which are infinite. Perhaps the more prominent might be certain atmospheric changes or conditions under certain adynamic states of the organism, irregularities in diet, drink, etc., certain states incident to menstruation, traumatism under certain vitiated conditions of the system, noxious emanations of telluric origin, etc., and many other less significant and familiar agencies might be named, if time permitted, that act influentially in lighting up the disease in question.

But, gentlemen, as I have already imposed upon the forbearance of this society, I will close with a brief allusion to the treatment of this malady.

From the standpoint I have determined for myself, and briefly indicated, it would be difficult for me to believe otherwise than that constitutional medication is the one and indispensable plan, and that entirely comprehended in the one remedy, iron. I am satisfied, gentlemen, that if we have a specific anywhere in the domain of medicine, that specific in this disease is the tincture of the chloride of iron, but it must be given oftentimes with an unsparing hand, say from thirty drop to dram doses for an adult every three or four hours uninterruptedly. I seldom find it necessary to use much quinine, though as an antipyretic we have nothing of more value where any special indication for its use exists; and circumstances do intervene, when its use is not only admissible but indispensable.

In the matter of stimulants I seldom find that urgent necessity that some would have us believe.

Local applications I regard very insignificantly. Indeed, further than their utility as palliatives, I have no interest in them. Of these I think I have received probably most benefit from the application of warm fomentations, poultices or cloths wrung out of hot water, applied over the surface involved, and changed frequently. The use of such applications as tincture of iodine, nitrate of silver, potassa permanganate, etc., I have long since abandoned, as I am convinced that they are not only useless but injurious, in that they practically seal up the emunctories of the skin, which entails first a harsh, disagreeable condition of that organ, and, secondly, by thus retarding the eliminating process they directly favor the attack of more important organs.

It is useless to say, of course, that it is of the utmost importance that we see to it personally, that our patient be properly and well nourished.

PROLONGED ANESTHESIA.—M. BROWN-SEQUARD reported before the Biological Society of Paris, at a recent meeting, the case of an epileptic patient who had sustained a fracture of the arm, and in whom it was of paramount importance to prevent for a time the recurrence of convulsions. On the authority of two of his medical assistants he stated that this patient had been kept uninterruptedly in a state of chloroform narcosis for eight days.—*N. Y. Med. Rev.*, July 26, '84.

CASES FROM PRACTICE.

A CASE OF SYPHILIS OF THE BRAIN.

DR. H. H. VINKE, M. D., ST. CHARLES, MO.

The report of the following case may prove of interest on account of the multiplicity of lesions following a syphilitic chancre, of its comparative rarity, and the short time required for the evolution of secondary and tertiary symptoms, after the appearance of the initial lesion. On August, 15, 1883, W——, æt. 25, applied to me for treatment for an indurated sore in the furrow at the base of the glans penis, which had made its appearance after a period of incubation of twelve days.

The ulcer was ovoid, with a hard, firm and well defined base; it had all the characteristics of specific induration. This induration persisted for about four months, but finally disappeared under anti-syphilitic treatment. A pleiad of indurated ganglia was found in both groins. The sore was treated locally, and iron administered, as patient was extremely anemic, the anemia no doubt being partially the result of several attacks of intermittent fever, partially due to the specific poison of syphilis. On the fifteenth day of the following month (about thirty-five days after the appearance of the chancre), he came to me with a papular eruption upon the body, and mucous patches upon the tongue and fauces. These secondary symptoms made their appearance while the primary sore was still present, and although very obstinate, yielded upon the administration of large doses of the green and red iodide of mercury. The patient was very irregular in taking medicine; as soon as these lesions disappeared he would discontinue the medicine, to resume it again as soon as the sore throat and the eruption reappeared. He took medicine in this irregular manner for about four months: he did not then return.

On May 10, 1884 (about nine months after the appearance of the primary sore), I was called to his house and found him in the following condition: Patient has a hemiplegia of the right side; he has a peculiar staggering gait, dragging his right foot after him, which renders walking very difficult: the power of motion of the right arm is impaired in a like manner as that of the leg. The face of patient is devoid of animation and expression, and the mouth is drawn to the healthy side. When he is asked to protrude the tongue, the tongue is pushed to the right side, the paralyzed side. He experiences great difficulty in articulating, especially in pronouncing words containing the vowels o and u, and the dental and lingual consonants; he is entirely unable to pronounce some words. Then, again, in many instances he uses the wrong words, being unable to use and remember the right words; he therefore has not only ataxic, but also amnesic aphasia. His memory is defective, and his intellect disturbed; he is very difficult of comprehension and very stupid.

Reflex movements, elicited by striking the tendon just below the patella, are exaggerated on the affected side. Patient complains of headache on the affected side, which is at times excessive. Temperature normal, pulse 92; vision and hearing unaffected. There is no impairment of the common forms of sensibility, that is no loss of appreciation of tactile, thermal and painful stimuli. There are several mucous patches on the fauces, but there is no eruption of any kind upon the body. These symptoms were gradually and insidiously developed, commencing with a persistent headache on the left side, about three weeks before I was called, which he believed to be neuralgia, and for which he resorted to quinine, but without relief. Then he commenced to experience a sensation of numbness and formication on the right side, which was gradually followed by some difficulty of locomotion. All these symptoms intensified, reducing him to that condition, in which I found him. I prescribed the iodide of potassium with the bichloride of mercury, and he was ordered to take about eighty grains of the former and one-fifth grain of the latter *per diem*.

May 13. All symptoms are very much aggravated. In making any attempt at locomotion, patient reels and falls; the paralysis of the right arm also is much more decided. But his mental condition especially is most deplorable. His memory is like a blank, and his mind almost completely wrecked. When asked any question only

an unintelligible jumble of words serves as an answer. This man, who has had a fair education, is now unable to read a single word; is unable even to pronounce a single letter. The power of speech, which a few days since was only impaired, is now completely lost; the aphasia, which was only partial then, is now complete. But patient still comprehends spoken language.

I advised mercurial inunctions and increased the dose of the iodide of potassium. The mercurial inunctions were continued till salivation was produced. The iodide of potassium was daily increased, till the patient was taking the enormous amount of $\mathfrak{5j}$, within twenty-four hours. As this amount caused too much gastric disturbance, the dose was decreased, and he was directed to take $\mathfrak{5ij}$ of the salt two hours after each meal.

As soon as he was taking such large doses of this drug, the psychical condition of patient began to improve, so that in about fourteen days he was able to speak and read again. The paralytic condition of his leg also improved rapidly, so that within twenty days he could walk again without any difficulty. The paralysis of his right arm, however, was much more obstinate, and only after he had been under treatment for five weeks could he make use of his arm again.

When he had been taking $\mathfrak{5vj}$ of iodide of potassium daily for about four weeks, an erythematous eruption showed itself on the right arm, extending from the fingers to the shoulder. The arm was much swollen and intensely red, the temperature of the same was also much increased. This eruption assumed a papular form, but disappeared in a week or two, after discontinuing this remedy. Nitric acid was substituted for the potassium salt, under the administration of which patient continued to improve till recovery was complete.

It will be observed, that in the above case secondary symptoms made their appearance, while the primary sore still remained, and again, that tertiary syphilis was developed while patient was still suffering from the secondary symptoms of that disease.

SPARKLING WATERS.—E. H. Bartley, M. D., chemist to the City of Brooklyn, says that it has been noticed that waters containing a very large quantity of organic impurity are unusually bright and sparkling in taste and appearance. This very brilliancy is a suspicious sign in well and spring waters.

EDITORIAL.

THE CHLORAL TREATMENT OF DIPHtheria AND CROUP.

We have just read with pleasure a little volume whose contents seem to us of such interest that we take this opportunity of presenting the subject to the attention of our readers.

Dr. C. B. Galentin, in a monograph of some seventy-five pages, reviews the history of diphtheria, croup and plastic bronchitis, considers the various views of the authorities regarding their etiology and the various modes of treatment which they have practised.

He does not accept the theory that diphtheria is caused by bacteria, believing that that theory ignores many important facts.

He denies the local origin of the disease, and maintains that only blood-poisoning, toxemia, can induce the phenomena of the disease. He does not advance any theory as to the real nature of the poison which induces the disease. Whatever its nature, however, he believes it is demonstrated that it may enter the system (a), possibly by direct contract; (b), through the circumambient air; (c,) with the water that is drunk or the food that is eaten.

The important part of the book, however, is that in which, after reviewing the various methods of treatment which have been advocated from time to time by various authors and practitioners, Dr. Galentin calls attention to a mode of treatment by means of which he claims to have had no more than two per cent., of mortality in the treatment of over five hundred cases.

He bases his treatment upon the local application and internal administration of chloral hydrate. He states that during the last

six years he has seldom used any other local application in cases of diphtheria than solutions of chloral.

He recommends the application, by means of a soft camel's hair brush or a feather, of a twenty-five to fifty per cent. solution of chloral hydrate, which should be repeated two or three times a day. He has found this to cause a rapid disintegration of the false membrane, rather than a separation of it in mass. He recommends that externally the neck be enveloped in several thicknesses of soft, dry flannel.

In the constitutional treatment of the disease the author's chief reliance is again upon chloral hydrate, which, he claims, has specific virtue as a remedy against the diphtheritic virus. He thinks this is explained in part by the power of chloral to check the formation of exudation and to prevent coagulation.

He advises it in all cases of this disease and says that the dose must be regulated by the hypnotic effect produced. He claims the best results are secured when a moderate hypnotic effect is produced.

When the stomach is irritable and the administration of chloral is thus prevented for the present he administers a full dose of calomel and soda. Sometimes other anti-nauseant measures are necessary. If malignant or typhoid symptoms develop, the administration of pure whisky or brandy is indicated. This he has found to be less frequently necessary with the chloral treatment than with any other which he has used.

In nasal diphtheria he recommends the abundant injection of weak pure soap-suds two or three times daily, followed by a weak solution (three to fifteen per cent) of chloral hydrate, carbolic acid, lactic acid, etc., the chloral being preferred.

When the larynx is involved he uses a dilute solution of chloral in the form of a spray, or preferably the vapor of lime and chloral, formed by slacking a pound of quick lime in a coffee pot or an open mouthed fruit jar by pouring upon it a pint of water in which is dissolved a dram of chloral. If a coffee pot or similarly con-

structed vessel is used, the vapor may be directed into the patient's face by means of a rubber tube so that it shall be fully inspired. In laryngeal cases this should be repeated every hour for ten or fifteen minutes.

Dr. Galentin believes that chloral is prophylactic as well as curative and recommends its administration to those who have been exposed to diphtheritic infection.

Certainly claims such as these should be carefully investigated, and if others shall meet with anything like such success as Dr. Galentin reports he will have merited lasting honor from the medical profession for having originated a method of treatment for this dread disease so far surpassing any heretofore in vogue.

SURGICAL OPERATIONS UPON THE PREGNANT WOMAN.

A discussion arose in the Paris Surgical Society upon the propriety of performing severe surgical operations upon the pregnant woman (*Gaz. Heb.*, No. 30.)

M. Larger asked the advice of the Society upon the following case: A pregnant woman, aged 27, has a tumor of the left breast. This, which before pregnancy was the size of a small egg, has now attained that of a man's head. It is a very vascular encephaloid, but not adherent nor as yet involving the lymphatics.

M. Palaillin described a similar case; a woman six months pregnant had mammary cancer. She was anesthetized and the growth removed; the wound healed kindly and parturition took place normally and recovery therefrom was without complications. The cancer, however, returned one year later.

M. Terrilon:—A woman in the fifth month of pregnancy suffered fracture of the fore-arm with rupture of the radial artery. She was half an hour under chloroform during the surgical treatment but no bad result ensued.

M. Verneuil thought that operation demanded by such accidents as hemorrhage, strangulated hernia, or tracheotomy, should be practised without hesitation during pregnancy. The patient of M. Larger attacked by a cancer that must continue to increase, should be operated upon. Strict antisepsis should be applied and open dressing, to diminish as much as possible the chances of traumatic fever.

THE EDUCATION OF DEAF MUTES.

In the cases of children having but a small remnant of hearing power, it is a question of painful moment to parents how such are to be educated. Deaf children by compensation are often remarkably quick to see and to move about; indeed, they sometimes remind one of the nervous restlessness of monkeys. In consequence, they readily adopt the sign language and develop it sufficiently for their needs. This faculty reconciles the guardians, and so the matter usually rests; the child hears through vision, if the expression is allowable, but remains dumb to those unfamiliar with its pantomime; while possessed of an alert and inquiring intelligence, it is cut off from society and the inestimable pleasures and amenities that flow from social intercourse. There can be doubt that in many cases of partial deaf-mutism, where the hearing power is still capable of perceiving loud tones of the voice and some distinct noises of moderate pitch, children can be saved from falling into the lamentable state of permanent, hopeless deaf-mutism. It needs no argument to prove that the auditory apparatus must be subject to the law that an organ suffers impairment by disease; like every other part of the body its processes of nutrition are regulated by its activity, and total disuse must in consequence result in atrophy and functional extinction. Therefore, to surrender a child with any remaining power of hearing to the dead blank of sign language is equivalent to condemning audition to sure destruction; the organ of Corti and the

central ganglia must gradually degenerate and disappear as functioning parts.

Parents should then be strenuously urged to train children suffering from imperfect hearing like other members of the family; they should not be allowed to use sign language nor be addressed in such. They should have special attention, and be systematically drilled in reading aloud as well as in conversation. The unready ears will be quickened and stimulated to action by having the child follow closely the movements of the lips and general facial expression. It is possible for one completely deaf to converse in this manner, and more rapidly than where there is articulation. The aid thus given in time affords familiarity with an extensive vocabulary; so that sounds at first feebly caught become more certainly appreciated, and the degenerating nerve apparatus receives a tonic that tends to restore its integrity, or, at all events, is likely to maintain it in such an improved condition that ordinary conversation becomes a possibility in place of utter ostracism. This humane method of education, however, demands such a degree of patience and genuine sympathy in the teacher, besides the teaching capacity, that schools based upon the system must remain few in number, and such as there are deserve the support of the profession.

Attention has been called to such a school in Chicago successfully conducted by Miss M. McCowen, formerly teaching in the Nebraska State Deaf and Dumb Institution. There should be such schools in every community, for the demand is imperative.

FACIAL SPASM CURED BY CAUTERY OF THE SCHNEIDERIAN MEMBRANE.

Dr. Fraenkel described before the Berlin Medical Society a case of chronic facial spasm of four years standing, aged 45. All the facial muscles on the left side, while she was awake were violently convulsed with short intervals. She had been treated after

every known method without effect. She complained of pain in the left side of the nose; there was periostitis over the nasal bone which healed in a few days. On examination of the left nasal passage, a violent spasm was excited by introduction of the speculum, touching the mucous membrane with a probe excited the same. Applying the galvano-cautery, the symptoms, both subjective and objective improved at the first sitting. The patient could talk without being annoyed with the spasms. I have touched the inferior turbinated and middle bones and the middle meatus five times; these were the excitable parts, especially the last. Patient is now free from spasm and has remained so for six weeks.

The nasal condition was that of a catarrh which, if not hypertrophic, was about to assume the atrophic form. There were no symptoms other than the one described, no sneezing, no discharge, no stenosis.

BRANCHIAL CYSTS OF THE NECK.¹

Under the above title Dr. N. Senn of Milwaukee read an exhaustive article before the Section on Surgery and Anatomy of the American Medical Association. It is published in full in the *Journal of the Association* August 23, 1884. Of the many names, branchial cysts, dermoid cysts of the sheath of the internal jugular veins, deep seated atheromatous tumors of the branchial clefts, hydrocele colli congenita, hygroma colli, atheromatous cysts of lymphatic glands, he prefers the term "branchial cysts," as it expresses both the location and the character of the tumor. The primary origin of them, he says, must necessarily correspond in position to one of the branchial clefts, and clinical experience has demonstrated that they are most frequently found in the region of the second and third clefts in the vicinity of the phar-

1. We are indebted to Dr. Tilley, of Chicago. for this abstract which we have introduced as editorial.—[ED.]

ynx and larynx and in intimate relation with the sheaths of the large vessels of the neck. In this they differ from dermoid cysts, which are more superficial and are more frequently found about the orbits and in the scalp. Those originating in the second and third branchial clefts, he says, are always observed in the sheath of the large cervical vessels, usually in the carotid triangle above the omo-hyoid muscle. They appear to occur more frequently on the left side of the neck. Their shape is invariably round or oval, with a smooth surface. The contents of these cysts being either fluid or semi-fluid, fluctuation can be felt, more particularly if the tumor is palpated between two fingers from the pharynx or the floor of the mouth and the external surface. Only lateral motion of the tumor is possible, on account of its peculiar attachments to the deep tissues of the neck. If the tumor is only of moderate size, the pulsations of the carotid artery can be felt on its inner margin. If it is large, it overlaps the artery, when the pulsations of the vessel are communicated to the tumor. Smaller tumors can be made to pulsate, by bending the head backward and in a direction opposite to the tumor.

Quoting from Roser he gives three modifications of the affection, varying according to the extent of the branchial cleft originally left unobliterated.

1. Branchial fistula in case the entire tract remains patent.
2. Cystic fistula in case only one extremity of the cleft is obliterated while the other communicates with the pharynx on the cutaneous surface.
3. Branchial cysts in the event the tract is closed at both ends while between them it remains open, and by proliferation from the inner surface produces an accumulation—the contents of the cyst.

The cysts he says should be classified according to their contents, bearing in mind the degenerative changes which time and the varied conditions of the system necessarily produce, and submits the following: mucous cysts, atheromatous cysts, serous cysts, and hemato cysts.

The mucous cysts are the result of the imperfect closure of the upper portion of the branchial cleft. Many of the so-called granular cysts about the base of the tongue belong to this type. The sac assumes an hour-glass shape, the constricted portion connecting the cervical with the lingual portion; by alternate pressure the contents may be forced from one portion to the other.

Atheromatous branchial cysts are usually located in the second and third branchial tracts in the region of the hyoid bone and intimately connected with the deep cervical vessels. The contents resemble the contents of a retention cyst of the skin, but they never contain anything which would indicate the presence of hair follicles, or any of the more complicated products of dermoid cysts. This variety is illustrated by a number of cases.

Serous cysts. The walls are thin and the contents serous, with epithelial cells and cholesterine, and may be developed in any one of the branchial clefts which fail to be completely obliterated. They are formed anywhere in the neck, between the lower jaw and the clavicle.

They are usually deep-seated and occasionally superficial. They are painless and give annoyance only from their size. Clinically they may be recognized from their location, their globular, cystic form, soft, fluctuating feel and painless growth. The existence of tessellated epithelium upon the inner surface of these cysts has been demonstrated by Neumann and Baumgarten. When these cysts spring from the second or third branchial clefts they are usually deeply located. Hueter, in extirpating a tumor of this kind in a child two years of age, ascertained that it extended between the two carotid arteries back to the walls of the pharynx. When they are deeply situated they are usually in contact and connected with the sheath of the large cervical vessels, receiving a distinct impulse from the underlying artery. When thus located they offer the same difficulties to extirpation as the atheromatous variety.

Evidence is not wanting to show that these serous cysts some-

times get well of themselves and disappear completely after puncture; whilst in other cases when left alone they take on enormous dimensions. A case in point occurred in an infant, and took its origin in the region of the inferior maxillary bone, and occupied the whole side of the neck and upper part of the thorax on the same side, from where it extended as far as the umbilicus. The hemato-cysts of branchial clefts are characterized by the admixture of blood with the contents of the cyst. In some cases the connection of the blood vessel may be direct, in which case the tumor can be emptied by continued gentle pressure, while in other cases the blood is present on account of minute capillary hemorrhage. In the latter case they can be diagnosed from serous cysts only by the contents.

In diagnosis due attention must be paid to the location of the cyst and the time of development. The following are quoted as conditions which may simulate branchial cysts:

1, Aneurism; 2, angioma; 3, dermoid cysts; 4, retention cysts; 5, affections of lymphatic vessels and glands; 6, struma cystica; 7, simple serous cyst.

The prognosis. With the single occasional exception of the serous variety, the branchial cyst continues its growth until by its size it encroaches on important organs, giving distress which nothing but operative measures will relieve.

Of the various methods of treatment, incision, actual cautery, seton, puncture with subsequent injection, extirpation, antiseptic drainage, the author advocates the complete extirpation. He says: A positive diagnosis made, the best plan to pursue is to make an incision over the most prominent portion of the tumor, and, in case the adhesions can be separated without endangering the deep cervical vessels, the entire cyst should be removed. If inflammatory infiltrations obscure the field of operation at the base of the tumor, and after careful examination it is not deemed advisable to perform complete extirpation, the sac should be opened and the lateral walls excised, and the epidermal matrix, which re-

mains adherent to the sheath of the cervical vessels, can be destroyed completely by a careful but vigorous use of the actual cautery. The treatment of the wound should be conducted as in cases of complete excision. If an early diagnosis is made, and prompt treatment instituted, complete extirpation should always be attempted, and will in the majority of cases prove successful and comparatively free from danger.

A STATISTICIAN.—Dr. Farr, we believe it was, recently stated that if one could watch the march of 1,000,000 people through life, the following would be observable: Nearly 150,000, would die the first year, 53,000 the second year, 28,000 the third year, and less than 4,000 in the thirteenth. At the end of forty-five years 500,000 would have died. At the end of sixty years 370,000 would be still living; at the end of eighty years 97,000; at eighty-five 31,000; and at ninety-five years, there would be 223; and at the end of one hundred years there would be one survivor.—*Scientific American*, Sept. 27, 1884.

THE ANNALS OF SURGERY.—We are gratified to learn that arrangements have been completed for resuming the publication of the *Annals of Anatomy and Surgery*, which up to the time of its discontinuance was one of the ablest and handsomest of the journals on our exchange list. It will be devoted to surgery alone, as indicated by the change in name. It will be enlarged so as to make it a comprehensive record of contemporary surgical work; it will retain the typographical features that formerly distinguished it. Dr. Lewis S. Pilcher, one of the former editors, will be the editor-in-chief, and there will be associated with him as collaborators some of the ablest and most distinguished surgeons of the United States and Great Britain. The first number will bear the date of January 1885, and it will appear monthly thereafter, being issued simultaneously in this country and Great Britain. Jas. H. Chambers & Co. of St. Louis, under whose able management the *COURIER* has been carried on during the past three years, will also have the publication of the *Annals of Surgery*. We predict a grand success, which will be well earned and richly deserved.

BOOK REVIEWS AND NOTICES.

THE EAR; Its Anatomy, Physiology, and Diseases. By CHARLES H. BURNETT, A. M. M. D., Professor of Otology in the Philadelphia Polyclinic and College for Graduates in Medicine; Consulting Aurist to the Pennsylvania Institution for the Deaf and Dumb; Aural Surgeon to the Presbyterian Hospital, Philadelphia; President of the American Otological Society. With one hundred and seventy illustrations. Second edition. Revised and rewritten. *Philadelphia: Henry C. Lea's Son & Co.* 1884. 8vo.; pp. 576; sheep. (St. Louis Stationery & Book Co.; J. H. Chambers & Co).

We have looked forward with much interest to the second edition of Dr. Burnett's very excellent treatise on the ear. An earnest and active worker in this field the author has fully realized our expectations and gives us a work which is abreast with the present status of otological science.

"In the seven years," quoting from his preface, "which have elapsed since the publication of the first edition of this work the advances in the science of otology have been very rapid and of an eminently practical character."

In the nature of the case many alterations have been required and it has been necessary to rewrite very much of the original work. The author indicates the headings under which important changes have been made as follows: The Abnormalities of the Auricle, Otomycosis, The Treatment of Chronic Otorrhea, The Classification and Treatment of Aural Polypi, and the Diagnosis, Etiology and Treatment of Aural Vertigo. This warrants a more extended notice than is usually accorded to the reissue of a book.

Besides the changes referred to valuable additions have been made to the chapter on Chronic Catarrhal Inflammation of the Middle Ear. The amplification of this subject we note with much satisfaction. We especially commend this statement: "In by far the vast majority of cases of chronic catarrh more benefit is derived from the proper treatment of the nose and pharynx than from direct medication of the tympanum." This presents a point of much importance in the treatment of this class of aural affections that

we could wish that diseases of the nose had been more thoroughly considered. The relations are so fixed and intimate between these accessory cavities; and the success of the aurist in this class of diseases is truly so dependent upon the successful treatment of the nasal complication and the connected treatment of this with that of the extended membrane into the tympanum, that we cannot relegate these diseases to "purely rhinological sources" for treatment.

We feel obliged to deprecate the recommendation of the nasal douche—believing it to be inefficient and unsafe. The moral effect of it is bad, leading the patient to suppose that he has a sure means of treatment in his own hands while in point of fact chronic nasal inflammations must as necessarily be treated by the surgeon as chronic inflammations of the tympanum if relief is to be effected. The treatment of catarrhal inflammations by the douche is also inconsistent with the accepted methods as applied to the treatment of similar conditions of inflammation, suppurative or non-suppurative, in the tympanic cavity. However, in justice to Dr. Burnett it should be said that he strictly limits the use of the douche "to the treatment of ozena, or fetid nasal catarrh, and the irrigation of the parts after operating on them." But even here the douche presents no advantages over the spray.

An exhaustive consideration of the method employed in the treatment of chronic purulent inflammation and the course and consequences of this form of trouble contained in the sixth, seventh and eighth chapters renders this portion of the work of very great value. At the same time that the student has presented to him a varied therapeusis from which to choose he is not left in doubt as to what method the writer has found from experience to be the most reliable, and his experience we think would be indorsed by the best authorities on the subject.

In Section VI, the author sets forth in a concise manner the present state of our knowledge in regard to diseases of the internal ear. We have been especially pleased with the definitions and divisions which he makes in treating the subject of aural vertigo.

Altogether we heartily recommend this work on the ear. Its classification is convenient. The illustrations are apt and good; and the mechanical execution worthy of the house from which it emanates.

H. N. S.

DISEASES OF THE THROAT AND NOSE. By MORELL MACKENZIE, M. D., etc. Vol. II. Philadelphia: P. Blakiston, Son & Co. 1884. 8vo., pp. 559; cloth; \$3.00. (St. Louis: J. H. Chambers & Co.)

DISEASES OF THE NOSE AND THROAT. By MORELL MACKENZIE, M. D., etc. New York: Wm. Wood & Co. 1884. 8vo.; pp. 391; cloth. (Wood's Library) (St. Louis Book & Stationery Co.)

This volume completes the very valuable work of Dr. Mackenzie, the two forming an exhaustive cyclopedia upon the diseases of the throat and nose and their treatment. The first volume upon the Pharynx, Larynx and Trachea, has been already noted in the COURIER; the present volume is equally complete in material and equally excellent in the publishers' work; in it the esophagus, nose, and naso-pharynx are treated of. To the esophagus, 234 pages are devoted, (nearly one-half of the volume).

The subject of cancer of the gullet, so interesting in the light of recent surgery with its bold operations in this region, is well discussed, the history of late operative methods being entered into with detail.

The complete account of nasal disease and that of the naso-pharynx, brings the reader up to the latest discoveries made in this territory. As great activity has been shown in this direction there is much of importance to be recorded, e. g., the discovery of the profound implication of the nervous system in diseases of the nasal mucous membrane, giving rise notably to reflex asthma; the nature of hay fever; operations upon the nasal septum to correct curvature and obstruction, etc.; disease of the naso-pharynx and its relation to deafness.

Under the head of instruments for examination of the posterior nares, the author makes a positive statement that, considering the weight of such testimony, it is well to bear in mind—pp. 249 and 250, Mackenzie declares that the simple small laryngeal mirror will "answer every purpose." The great variety of complicated and otherwise objectionable instruments devised for this purpose and constantly pressed upon the notice of the profession, makes this opinion all the more valuable. Rhinoscopy is difficult, especially to the awkward or inexperienced, but the difficulty is not to be overcome by the pattern of the mirror. The immense evil of the

joints and other inevitable receptacles of saliva, in the movable mirrors, is alone sufficient to condemn their use. In respect to the numerous tribe of palate hooks and other devices for holding a restless velum, Mackenzie also waves them aside p. 251, "I rarely use even a simple hook." I feel convinced that in these two wholesome judgments upon the method of rhinoscopy, the practised examiner will find a coincidence with his own experience. Tact, gentleness, and perseverance, are necessary to a successful examination in rhinoscopy.

The subject of hay fever, has a special chapter as its prominence demands. The author's views, as its well-known, have been widely quoted.

Definition: "A peculiar affection of the mucous membrane of the nose, eyes, and air passages, giving rise to catarrh and asthma, almost invariably caused by the action of the pollen of grasses and flowers." Mackenzie therefore does not incline to the view of a purely constitutional cause. He admits that an unhealthy state of the nasal mucous membrane may predispose, but has repeatedly observed only a general congestion during the attack. Persons of nervous temperament are sometimes spared the periodical attack by timely use of proper tonics.

In the section on the naso-pharynx, the well-known chronic catarrh of that space is called "American catarrh," since "the complaint is so extraordinarily prevalent in America, as compared with any other country, that it may be regarded with all propriety, as a national affection." Dr. Mackenzie thinks the cause of this American disease is the dusty atmosphere, "for dust is to be found everywhere in America." The comments upon the state of our roads, both in and out of the cities, might be read to advantage by the social reformer.

The volume like its predecessor is copiously illustrated with excellent cuts.

The enterprise of Messrs. Wood & Co., has already included this book in the Woods' Library of Standard Authors.

C. A. TODD.

THE DISEASES OF CHILDREN. A Handbook for Practitioners and Students. By ARMAND SEMPLE, B. A., M. B., etc. London. 1884, New York: G. P. Putnam's Sons. Small 8vo., pp. 352, cloth. (St. Louis Book & Stationery Co.; Jas. H. Chambers & Co.)

This is a fair attempt at making what we have always considered a rather harmful class of books. Ostensibly an introduction to

a special study, it is merely time wasted to the student in its perusal, whereas as an assistant to the practitioner it is useless from the fact that it can only embrace the most marked and ordinary indications either of disease or therapeutics, with a knowledge of which he is presumably familiar and if he is not, he requires more thorough teaching. The author is fully able to make a more useful and therefore a more salable book. The mechanical work is perfect.

G. A. M.

A NEW METHOD OF RECORDING THE MOTIONS OF THE SOFT PALATE.

By HARRISON ALLEN, M. D. *Philadelphia: P. Blakiston, Son & Co.* 1884. 8vo.; pp. 34; cloth.

This little volume contains a paper which describes in detail and with numerous illustrations an ingenious device of the author for recording the motions of the soft palate in speech, etc.

A TEXT-BOOK OF PATHOLOGICAL ANATOMY AND PATHOGENESIS. By ERNST ZIEGLER. Translated and Edited for English Students by Donald MacAlister, M. A., M. B., etc. Part II. Pathological Anatomy, Sections I—VIII. *New York: Wm. Wood & Co.* 8vo.; pp. 365, cloth. (Wood's Library). (St. Louis Book & Stationery Co.)

Having in a former number of the *Courier* (Jan. 1864), expressed our sense of indebtedness to Dr. MacAlister for the care and ability with which he translated the first part of Dr. Ziegler's work, we can but renew and repeat the same concerning the present volume.

The sections contained herein are entitled "Blood and Lymph," "The Vascular Mechanism;" "The Spleen and Lymphatic Glands;" "The Serous Membranes;" "The Skin;" "The Mucous Membranes;" "The Alimentary Tract;" "The Liver and Pancreas."

Dr. Ziegler is one of the ablest of the modern German pathologists and it is among them that the most thorough and careful studies in this department have been now for many years carried on.

LEGAL MEDICINE. By CHARLES MEYMOTT TIDY, M. B., F. C. S., etc. Vol. III. *New York: Wm. Wood & Co.* 8vo.; pp. 321.; cloth. (Wood's Library). (St. Louis Book & Stationery Co.)

This third volume contains those chapters of Dr. Tidy's work which discuss Legitimacy and Paternity; Pregnancy and Abortion; Rape and Indecent Exposure; Sodomy and Bestiality; Live Birth and Infanticide; Asphyxia and Drowning; Hanging, Strangulation and Suffocation.

The first two of these volumes were contained in the Library for 1882, and the Third and Fourth were to have followed last year, but were not then ready and are accordingly presented in the Library of 1884. It is an exceedingly valuable part of the Library. It seems a pity that the four volumes which constitute one work, being divided between the libraries of different years are not bound alike.

HOOPER'S PHYSICIANS' VADE MECUM. A Manual of the Principles and Practice of Physic, with an outline of General Pathology, Therapeutics and Hygiene. Tenth Edition. Revised by Wm. A. GUY, M. B., Cantab., F. R. S., etc., and JOHN HARLEY, M. D., Lond., F. L. S. New York: Wm. Wood & Co. 1884. Vol. I.; pp. 338; Vol. II.; pp. 358. (Wood's Library). (St. Louis Book & Stationery Co).

These are two valuable volumes and as revised by Drs. Guy and Harley contain much valuable information not found in formal treatises on diseases.

That the author succeeded in making a thoroughly practical and serviceable handbook is evidenced by the fact that the work has reached its tenth edition in England, and this is a reproduction of that English edition.

TRANSACTIONS OF THE LOUISIANA STATE MEDICAL SOCIETY at its Sixth Annual Session, held at Baton Rouge, La., May 21, 22 and 23, 1884. 8vo.; pp. 103; paper.

This pamphlet contains, besides the Secretary's Minutes of the Daily Sessions; the Annual report of Committee on State Medicine and a petition with reference to the teaching of physiology and hygiene in the public schools; reports of officers and committees; annual addresses and oration and three original contributions, viz.: one by Dr. H. D. Bruns, on "Acute Plastic Iritis;" one by Dr. A. G. Friedrichs on "Deciduous Teeth;" and one by Dr. Felix Formenti on "Cremation."

These papers were well and carefully prepared, and we could but think it would be well if the publication committees of our other State Associations, would use the pruning knife more vigorously, throw aside more papers, and publish smaller and better volumes of transactions.

THE MEDICAL GRADUATE AND HIS NEEDS. By GEO. C. WELLNER, M. D. *Detroit: Geo. S. Davis.* 1884. 12mo.; pp. 100.; cloth. (St. Louis: J. H. Chambers & Co.)

The latter chapters of this little volume are much better written than the first ones. They are practical and suggestive. The early

chapters are characterized by an unsuccessful attempt at rhetorical effect such as is commonly called sophomoric.

In the preface the author remarks: "Its being the only one of the kind may serve as its *raison d'être*." Honestly, we have been able to find no other and this does not seem altogether satisfactory.

THE NATIONAL DISPENSATORY containing the Natural History, Chemistry, Pharmacy, Actions and Uses of Medicines including those recognized in the pharmacopeias of the United States, Great Britain and Germany, with numerous references to the French Codex. By ALFRED STILLE, M. D., LL. D. etc., and JOHN M. MAISCH, Phar. D., etc. Third Edition. Thoroughly revised with numerous additions. With three hundred and eleven illustrations. Philadelphia: Henry C. Lea's Son & Co. 1884. 8vo.; pp. 1755; sheep. (St. Louis: J. H. Chambers & Co.)

It is only five years since the first edition of this Dispensatory was given to the profession. The fact that a third edition has been already necessary speaks for the high appreciation which it has met. Prof. Stillé's long experience as a teacher of therapeutics with his eminent ability as a therapist give to his opinions as to the therapeutic value of a drug very great value.

We have neither time nor space to enter into a detailed review of this volume nor is it required. It is a library in itself which the professions of practical medicine and pharmacy have tested and proved to be of the highest value.

DIPHTHERIA, CROUP, ETC., or the Membranous Diseases; Their Nature, History, Causes and Treatment, etc., also, a delineation of the new chloral hydrate method of treating the same. By C. B. GALENTIN, M. D. New York: J. H. Vail & Co. 1884. 8vo.; pp. 174; cloth. (St. Louis, Stationery & Book Co.; J. H. Chambers & Co.)

We have read this book with attention and great interest. The author has something to say and says it very well. The facts which he presents, if substantiated in the experience of others, are of the very highest importance and of the greatest value to suffering humanity. We have elsewhere called the attention of our readers to Dr. Galentin's views in regard to the treatment of diphtheria and here will only note some points regarding the book from the standpoint of literary and mechanical execution.

At the end of the book is a list of *errata* in which there is a notable error, viz., the third, which requires the change of the word "*coagula*" on p. 74, line 24, where it is used correctly to *coagule* which is not a correct word at all.

If there is to be a list of errata at all, it should contain the following as well as those given:

PAGE.	LINE.	READ
18	3	septicæmia for septicæmia.
29	29	œsophagus for œsophagus.
40	15	greater for grearter.
58	16	analogous for analagous.
59	23	proportion for prorporation.
86	22	salicylic for salicilic.
89	33	" "
96	13	teaspoonfuls for teaspoonsful.
96	19	Bretonneau for Bretonnau.
97	7	" "
97	21	" "
102	31	occurred for occured.
105	27	Inasmuch for In as much.
111	12	canvass for canvas.
113	30	living for tiving.
118	18	medicinal for medicinial.
123	10	membranous for membraneous.
131	32	acute for accute.
136	11	relaxation for relaxtion.
140	20	least for last.

In spite of so many verbal and literal inaccuracies the volume is a valuable one and should be carefully read and its teaching thoroughly tested wherever a fair opportunity offers. A second edition will afford an opportunity for making correction of errors noted.

STUDENTS' MANUAL OF ELECTRO-THERAPEUTICS embodying lectures delivered in the course on therapeutics at the Woman's Medical College of the New York Infirmary. By R. W. AMIDON, A. M., M. D., etc. *New York and London: G. P. Putnam's Sons.* 1884. 12mo.; pp. 93; cloth; \$1.00. (St Louis Stationery and Book Co.; J. H. Chambers & Co.)

Dr. Amidon has presented in this little volume a good many helpful suggestions and practical hints in regard to the use of electricity as a means of diagnosis and therapeusis. In general the explanations are clear and easily understood. We note one error on p. 23, line 5, in the description of the course of the electric current as represented in the illustration. It should be described as running around the right half of the tire *t'*, through the spring *s'* instead of the spring *s'''* as it now reads.

It would be well to add a note on p. 42 indicating that "fc" de-

notes faradic contractility, inasmuch as this book is intended for students who are not supposed to be familiar with the nomenclature of electric technics.

On p. 44, note, there is a reference to a set of illustrations which we do not find in the book.

We doubt not this little volume will prove helpful to a more intelligent use of electricity by general practitioners.

BOOKS AND PAMPHLETS RECEIVED.

A Manual of Diseases of the Throat and Nose. By Morell Mackenzie, M. D., Lond. New York: Wm. Wood & Co. 1884. 8vo.; pp. 400; cloth. (Wood's Library.)—A Text-Book of Pathological Anatomy and Pathogenesis. By Ernst Ziegler. Part II. Edited by Donald MacAlister, M. A., M. B. New York: Wm. Wood & Co. 1884. 8vo.; pp. 365; cloth. (Wood's Library.)—A Text-Book of Practical Medicine. By Alfred Loomis, M. D., LL. D. New York: Wood & Co. 1884. 8vo.; pp. 1102; sheep.—Practical Manual of Obstetrics. By Dr. E. Verrier. New York: Wm. Wood & Co. 1884. 8vo.; pp. 395; cloth. (Wood's Library.)—Hooper's Physician's Vade Mecum. Tenth Edition. Revised by William Augustus Guy, M. B. Cantab., F. R. S., and John Harley, M. D., Lond., F. L. S. New York: Wm. Wood & Co. 1884. 8vo.; Vol. I, pp. 338. Vol. II, pp. 358. (Wood's Library.)—A Case of Chronic Tubercular Peritonitis. By F. C. Hoyt, M. D. (Reprint from St. Jos. Med. Herald.)—Legal Medicine. By Chas. Meymott Tidy, M. B., F. C. S., etc. Vol. III. New York: Wm. Wood & Co. 1884. 8vo.; pp. 321; cloth. (Wood's Library.)—On the Pathology and Treatment of Gonorrhea. By J. L. Milton. Fifth Edition. New York: Wm. Wood & Co. 1884. 8vo.; pp. 306; cloth. (Wood's Library.)—Diagnosis and Treatment of Diseases of the Heart. By Constantine Paul. New York: Wm. Wood & Co. 1884. 8vo.; pp. 335; cloth. (Wood's Library.)—Motions of the Soft Palate. By Harrison Allen, M. D., etc. Philadelphia: Presley Blakiston, Son & Co. 8vo.; pp. 84; cloth.—The Ear, Anatomy, Physiology and Pathology of. By C. H. Burnett, M. D. Philadelphia: Henry C. Lea's Son & Co. 8vo.; pp. 576; sheep.—Medical Jurisprudence and Toxicology. By J. H. Reese, M. D., etc. Philadelphia: Presley Blakiston, Son & Co. 12mo.; pp. 606; cloth, \$4.00; sheep, \$5.00.—Formation of Poisons by Micro-Organisms. By G. V. Black, M. D., etc. Philadelphia: P. Blakiston, Son & Co. 12mo.; pp. 124; cloth.—Quiz-Compend—Organic Chemistry. By Henry Leffman, M. D., D. D. S., etc. Philadelphia: P. Blakiston, Son & Co. 12mo., pp. 124; cloth, \$1.00; interleaved \$1.25.—Human Anatomy. By Harrison Allen, M. D., etc. Section VI. Organs of Sense, Organs of Digestion; Genito-Urinary Organs. Philadelphia: Henry C.

Lea's Son & Co. 4to.—Transactions of Louisiana State Med. Assoc. 1884.—Lock-Jaw of Infants. By J. F. Hartigan, M. D., etc. New York: Bermingham & Co. 12mo. sq.; pp. 125; cloth, 75 cents.—Index Catalogue of the Library of Surg. Gen'l, U. S. A. Flaccus—Health. Washington: Government Printing Office. 4to.; pp. 1055; cloth.—Practice of Medicine. By N. S. Davis, M. D. Chicago: Jansen, McClurg & Co. 8vo.; pp. 896; cloth.—Transactions of Med. and Chir. Faculty of Maryland. 8vo.; pp. 248; paper.—Hyperaesthesia. By James T. Searcy, M. D. Reprint from Transactions of Med. Assoc. of Alabama. 1884.—Genital Reflexes the result of an Abnormal Physical Condition of the Genital Organs known as Phimosis. By T. G. Comstock, M. A., M. D., St. Louis. (Reprint from the New York Medical Times, Sept. 1884.)—On the Development of Physiological Chemistry and Its Significance for Medicine. By Prof. Felix Hoppe-Seyler, M. D., Translated by T. W. Mills, M. A., M. D. (Reprinted from the New York Medical Journal, Aug. 17, 23, 1884.)—Questions submitted to the Graduating Classes of the Medical College from 1871-'72 to the present time. Cincinnati: W. H. Scott. 1884. 8vo.; pp. 50.; paper; 50c.—Protection and Free Trade To-day. By Robert P. Porter.—Medical College of Virginia, Richmond. Catalogue of Session 1883-'84, and Announcement of Session 1884-'85.—Cryptorchidism. By Robert W. Johnson, M. D. (Reprint from Transactions of the Med. & Chir. Faculty of Maryland.) 1884.—Preventable Blindness. By Samuel Theobald, M. D. (Reprint from Transactions of the Med. & Chir. Faculty of Maryland.)—Zeimsens' Motor Points of the Human Body. By Herbert Tibbitts, M. D. —Proceedings of the Nebraska State Medical Society, Sixteenth Annual Session held at Omaha, Neb., May 13—14, 1884. Lincoln, Neb.: Journal Company, State Printers, 1884. 8vo.; pp. 351; cloth. Chloral in Diphtheria and Croup, By C. B. Galentin, M. D. 1884. New York: J. H. Vail & Co. 8vo.; pp. 174; cloth.—American Liveryman and Horse-owner.—Annual Catalogue of the Baltimore Medical College, 1884-'85.—Annual Announcement of the St. Joseph Medical College, 1884-'85.—Irritation of the Prostate. By R. Harvey Reed, M. D. (Reprint from Columb. Med. Jour.)—A Periodical Painful Affection. By R. Harvey Reed, M. D. (Reprint from Journal Am. Med. Association, Aug. 30, '84.—Malaria and Malarial Diseases. By George M. Sternberg, M. D., F. R. C. New York: Wm. Wood & Co. 1884. 8vo.; pp. 329; cloth. (Wood's Library.)

CORRECTION.—Too late for notice in our last issue attention was called to an oversight in the proof-reading of the September COURIER. In Dr. Bribach's case of cranial fracture p. 220, third and fourth lines of second paragraph, the fracture should be described as "crossing the coronal suture near the *junction* of the upper and middle thirds of the anterior border of the parietal bone."

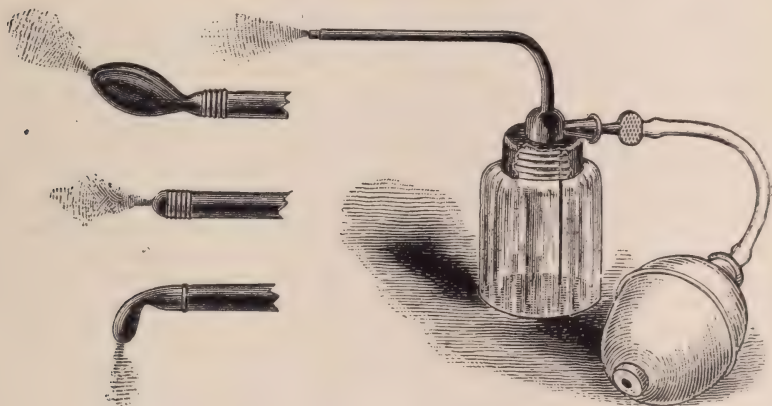
REPORTS ON PROGRESS.

SURGERY.

A CONTRIBUTION TO THE MECHANICS OF NASO-PHARYNGEAL PRACTICE.

BY H. N. SPENCER, A M., M. D., *St. Louis, Mo.*

The accompanying cuts to this article represent two simple mechanical devices which have served me so good a purpose in the treatment of nasal and naso-pharyngeal complications to aural difficulties that I submit them to the Society. The first (see cut



No. 1.

No. 1.) I shall not dilate upon. It is simply a modification of the powder-blower in most common use (Robinson's) and is intended to obviate an embarrassment which I have sometimes experienced, *i. e.*, the blowing out of the rubber cork and with it the contents of the bottle. The latter occurrence, which necessarily follows the former, is intensely disagreeable to both patient and

operator if such a powder as, for example, iodoform is being employed. The modification consists in the substitution of a screw cap for the cork, the internal or female screw being moulded in the bottle.

The second appliance (No. II.) is for the purpose of producing an instantaneous spray effect, which can be limited in great measure, to the point upon which it is desired to operate. It is composed of 3 parts, to wit, a nasal speculum, which has been described,¹ a stem



No. II.

and a bulb or receiver. The stem is introduced through a central perforation in a bar set in the proximal or expanded end of the speculum and protrudes just so as to escape the smaller end for insertion into the nostril. The bulb prevents the fluid from being drawn into the tubing and serves to produce also a more efficient atomization. The single hand-ball is required to take up the fluid and to expel it.

The importance of treating diseased conditions, diffused or circumscribed, of the naso-pharyngeal mucous membrane—where there exists deafness or tinnitus or any other symptom of aural disturbance—for the influence which it will exert upon these derangements is, I believe, fully appreciated. The importance of a careful examination and the treatment of the nasal mucous membrane in incipient ear-disease is, I think, not sufficiently urged in the text books.

Experience has proved to me sufficiently that the acute otitis media of children might often be averted by a prompt and judicious treatment of the coryza, to which it is a sequel. During the past winter I have been called a number of times to see young children suffering very intensely from pain in the ear, where dry heat employed externally and the application of a spray of argent. nitrat. (gr. 2, 3 to the ounce) to the nostrils have been sufficient to

1. "The mechanics of naso-pharyngeal practice." By H. N. Spencer, M. D., ST. LOUIS COURIER OF MEDICINE, July, 1879.

relieve the pain and to cause the injection of the tympanic vessels to disappear.

I have merely mentioned this as suggestive of the use to which such a little instrument may be put. I shall not attempt to explain the process by which such a result is effected, which explains itself at once to those who consider the anatomical relations and the reflex sympathy between these antipodal points of a common membrane. The applicability of this method of treatment is not limited to the condition just described. It is useful wherever the indication exists for the employment of such agents as nitrate of silver, acids or resinous solutions—where minute quantities are required or the application needs to be localized.—*Trans. Am. Otol. Soc.*, 1884.

Extraordinary Uterine Fibro-Cyst.—DR. C. C. STOCKARD reports a fibro-cyst of the uterus in a negro woman aged fifty years. She had borne several children and had enjoyed good health up to the time of the development of the tumor, about twelve years ago. Seven years ago she was tapped, the enlargement of the abdomen being regarded as ascitic by the physicians who saw her. The abdomen measured sixty-eight inches in its largest circumference. From the ensiform cartilage to the umbilicus measured twenty-seven inches—the navel being a little below the knees. The umbilicus measured five by three inches.

An attempt was made to afford her some relief by tapping, and a quantity of fluid amounting to eight gallons and seven pints was withdrawn. However the woman died six days after the tapping. The solid portion of the tumor was found to weigh fourteen pounds and the fluid contents twenty-four pounds, which, added to the seventy-one pounds drawn at the tapping, makes a total of one hundred and nine. It was estimated that the amount of fluid which escaped after the tapping and at the post-mortem would have brought the total weight up to one hundred and thirty-five pounds.—*N. Y. Med. Rec.*, July 16, 1884.

Extirpation of Left Kidney; Two Years Later Extirpation of Both Ovaries and Tubes on Account of Tuberculosis.—DR. MANDACH removed the left kidney from a woman aged twenty-eight on account of severe symptoms. For a year she had suffered from violent pains in the region of the left kidney, with vomiting, loss of appetite and frequent headache. In the urine there was

found much pus with numerous cheesy debris. Violent fever and regular chills heightened the picture of distress. The lumbar section was made. The kidney was full of abscesses and its pelvis with pus. After recovery from the operation the patient's condition was relieved only for a short time. Two years later a violent oophoritis defied all therapeutics and demanded operation. Both ovaries and Fallopian tubes were removed. The latter were full of pus and the former adherent to the tubes. After recovery from this last operation the menses reappeared and with them fresh difficulties, though less severe.

The organs removed were tuberculous.—*Centralblatt f. Chir.*, No. 35.

Cure of Cancer.—The statement is made in two recent Portuguese journals that the juice of one of the Euphorbiaceæ known as the Alvelos has been found by a Brazilian physician, Ignacio Alcebiades Velloso, to be a cure for cancer. A camel's hair pencil dipped into the juice of the Alvelos is applied to the cancerous surface in one or more places. After twenty-four hours this surface is well washed with an infusion of tobacco leaves, and lint moistened with arnica and water is applied for twenty-four hours, and the surface is again bathed with the tobacco decoction. The process is then repeated until cure is obtained.—*Western Med. Reporter*, Aug., 1884.

Pistol Bullet in the Urethra.—DR. N. P. DANDRIDGE had the following remarkable case in his service in the surgical ward of the Cincinnati Hospital: A colored man aged twenty-six was admitted to the hospital December 17, 1883, suffering from difficulty of micturition, having been unable during a year preceding that time to pass a full stream, the water escaping only in drops, and any attempt at micturition being extremely painful. He had contracted syphilis four years before and gonorrhea for the first time eighteen months before, recovering from the latter trouble rapidly. One year before he had had a sudden attack of retention of urine which had been temporarily relieved by the catheter, but he had suffered ever since as already mentioned. A hot hip-bath with ten grains of Dover's powder gave him considerable relief and enabled him to urinate more freely.

On examination the following day a foreign body was discovered at a distance of four and a half inches from the meatus. The

following day Dr. Dandridge made an effort to remove the body with forceps, but it was so firmly held that it was necessary to make an incision along the median raphe at the junction of the penis and scrotum upon the point of a sound. A leaden bullet considerably flattened and indented, nearly covered with urinary salts and firmly embedded in the tissues of the urethra was removed with some difficulty. One month later the patient was discharged feeling quite well.

The patient stated that in 1870 he received a pistol shot in the left groin and the surgeons were unable to find the bullet.

Very few cases are recorded in which missiles have entered the bladder and subsequently impacted in the urethra. This one makes an important addition to the list.—*Med. News*, Sept. 13, 1884.

Antiseptics in Surgery.—In the discussion on this subject in the section on surgery of the Copenhagen International Medical Congress, Prof. Esmarch called attention to the advantage of permanent dressings for wounds. He advocated the practice of thoroughly cleansing and disinfecting the parts and then sealing them with antiseptic coverings which are allowed to remain undisturbed as long as cleanliness and absence of constitutional disturbance will permit. He himself applies such dressings as soon as the main vessels are ligated and before the removal of the tourniquet, generally discarding drainage tubes but supporting the deeper parts and keeping them in contact by pressure. He prefers the bichloride of mercury as an antiseptic, though he sometimes uses others. He sometimes uses glass splints to support the parts until healing by first intention takes place. While he seldom uses drainage tubes he leaves openings for the escape of drainage into the bandages, which are sterilized by heat and the bichloride of mercury.

Prof. Mosely-Moorhof, of Vienna, advocated iodoform in the dressings, but cold water alone during the operations. Dr. Schede, of Hamburg, strongly urged the merits of the bichloride of mercury. Using it in the proportion of one to five hundred he stated that he had never yet seen any poisonous effect even in children.

Prof. Koeberlé, of Strasburg, uses no antiseptics, depends upon cleanliness for safety, wipes wounds with clean linen and adopts the open treatment.

MEDICINE.

Bright's Disease of Malarial Origin.—DR. I. E. ATKINSON has been led to study all the cases of malarial fever coming under his observation during the late summer and early fall of the past two years, at the Bayview Asylum. The conclusions which he reaches are as follows:

1. Transitory albuminuria is not uncommon in the course of malarial fevers, and is due to the intense visceral congestions characteristic of these affections. It only may endure throughout the height of the congestion, recurring with each return of this, or it may persist in the intervals, in which event a higher grade of congestion is attained, more nearly approaching a condition of acute inflammation.

2. In a proportion of cases, varying with locality and type of prevailing epidemic, or individual conditions, inflammation of the kidney occurs, accompanied by dropsy and the usual symptoms of nephritis.

3. The usual form of malarial nephritis is the tubal and diffuse variety. In this the inflammation seems to be most intense in the vicinity of the glomeruli.

4. Contracted kidney may occur as an advanced stage of malarial nephritis either from long-continued or frequently repeated attacks of malarial fever, or from fibrotic changes such as may ultimately occur in ordinary tubal or diffuse nephritis. It is altogether improbable that this form of malarial renal disease ever occurs primarily as purely interstitial nephritis.

5. These changes may be induced by any form of malarial fever, though they more commonly follow chronic intermittent fever.

6. The tendency of malarial inflammation of the kidney is toward recovery. But from the persistence of the impaludism or the intensity of the inflammation, structural changes may be produced that are characteristic of chronic Bright's disease, when the gravity of the affection will be as that from chronic Bright's disease from whatever cause.

7. Treatment should be directed primarily against the malarial intoxication, more especially in recent cases. A correction of this will often be followed by a complete, though often gradual, subsidence of the nephritis. Even in more chronic cases, the malarial

factor in the process should definitely be destroyed if possible, after which the disease should be treated as ordinary Bright's disease.—*Am. Jour. of Med. Sci.*, July '84.

Hay Asthma.—W. H. BEVERLY reports success in the treatment of hay asthma by the use of a powder composed of six drams each of datura tatula, stramonium, cannabis indica and lobelia inflata, with one ounce of powdered nitre and a half-dram of eucalyptus oil. This powder burns well, gives off dense fumes and affords great relief to the asthmatic attacks though it has little or no effect upon the catarrh, sneezing or coryza. A teaspoonful burned in the bedroom will often enable the patient to sleep.—*Brit. Med. Jour.* Sept. 6, 1884.

The Spread of Diphtheria.—DR. A. JACOBI read before the Medical Society of the County of New York Sep., 22, '84, a paper on diphtheria which he summarizes in conclusion as follows:

There is probably no spontaneous origin of diphtheria any more than there is a spontaneous origin of cholera or scarlatina.

Diphtheria is contagious. Severe forms may beget severe or mild forms. Mild cases may beget mild or severe cases.

What has been called follicular tonsilitis is mostly diphtheria. It is seldom dangerous to the patient, as the tonsils have but very little lymph communication with the rest of the body. But it is contagious.

This form is frequent in the adult, in whom it loses nothing, however, of its contagiousness.

Diphtheria in the adult proves dangerous to the community mostly because it does not restrain the patient from communicating the disease.

It is apt to last long, firstly, because most cases occur on a surface covered with pavement epithelium (tonsils); secondly, because of the constant exposure and neglect on the part of the patient. Even without it, diphtheria may last weeks and more; with it, it is subject to sudden relapses. As long as it lasts it is contagious.

As diphtheria is but a mild affection in many adults, who disregard it and frequently do not care to mention its existence, pain in swallowing and moderate malaise being the only symptoms, the question of transmission by means of clothing, etc., on the part of third persons is capable of becoming more difficult to answer than it ever was. Many a case which has been believed to be thus car-

ried is probably one of direct contagion from a patient to a second person, from this second to a third.—*N. Y. Med. Jour.* Sept. 27, 1884.

Treatment of Night Sweats of Phthisis.—DR. C. M. CAULDWELL has made a series of experiments to determine the relative value of different remedies which have been recommended for the purpose of controlling phthisical night sweats, the ideal drug being one which would not only control the sweating but do this without producing other unfavorable symptoms. The tests were made upon some five hundred patients, each remedy being tried with fifteen to twenty-five patients.

The following are the results which he obtained:

Atropine, when given in sufficient quantity to check the perspirations, frequently produced annoying throat dryness, insomnia, anorexia, or diarrhea. Moreover, in the majority of cases where it agreed, the sweating would reappear as soon as the drug was discontinued. The amount prescribed in twenty-four hours varied from one sixtieth to one twentieth of a grain.

Ergotin, which was strongly recommended by Professor Da Costa in a very interesting lecture, published in the *Medical News* for August, 1881, failed completely in my hands. It made considerable impression on the sweating, but, in almost every instance, produced either nausea, colicky abdominal pain, or some other form of gastro-intestinal disturbance. It was administered in gelatine-coated pills, from three to eight grains in divided doses being given in twenty-four hours.

Digitalis, even in large doses, although of great value in other respects, gave neither prompt nor encouraging results so far as the perspirations were concerned. The solid extract was the preparation used. From three to six grains were taken in twenty-four hours.

Aconite, recommended by homeopathic writers, greatly modified the sweats. It did this without producing unpleasant symptoms, but, as a rule, it gradually lost its power, and the troublesome symptom returned. One eighth of a drop of the tincture was given every hour or two, from ten o'clock in the morning till ten in the evening.

Paracoto Bark, so highly praised by several English physicians, acted with remarkable promptness in a number of cases. In others

it gave little or no relief. It had a tendency to constipate. When diarrhea and sweating were associated, it was most satisfactory. The preparation employed was a fluid extract prepared by Parke, Davis & Co. From twenty to forty drops were given three times daily.

Salicin proved eminently unreliable, and apparently increased the debility of many patients when continued for more than a week. From one to two drams were given in twenty-four hours.

Oxide of Zinc, though increased to half-dram doses, manifested but feeble and uncertain controlling power.

Picrotoxin, recommended by Dr. Ringer and Dr. Murrell, more nearly approached the ideal in view than any of the other drugs. It was prescribed for twenty consumptives suffering from profuse night sweats. In seventeen of the cases the perspirations were entirely checked, or so far diminished as to produce no further debility or annoyance. Even when given in much larger doses than are ordinarily prescribed, it caused no disturbance of the nervous system or of the gastro-intestinal tract—in fact, produced no evil effect whatever. In this respect it compared very favorably with atropine, ergotin, etc. A single full dose of the drug at bed-time was generally sufficient to control the sweating for twenty-four hours.

Where one dose failed, a second was taken shortly after midnight.

The initial dose, mentioned by Ringer and the English writers generally, is the one hundred-and-fiftieth of a grain.

This was found much too small, and accordingly increased to one-fortieth of a grain.—*N. Y. Med. Jour.* Sept. 27, '84.

Milk Diet.—DR. GEORGE JOHNSON in introducing a discussion upon albuminuria in the section of medicine at the late meeting of the British Medical Association emphasizes very strongly the value of a milk diet in the treatment of that affection. He regards the obtaining, as far as possible, physiological rest for the kidneys as being the most important element of the treatment. To secure this he recommends rest in bed in all acute and severe cases, promotion of the secretions of the skin and bowels, and, above all, a scanty diet with entire abstinence from alcoholic stimulants.

In recent acute cases he recommends an exclusive milk-diet. He directs a half pint of milk to be taken every two hours by an adult and to continue treatment until the albumen entirely

disappears from the urine. Sometimes when the albumen has entirely disappeared during the use of an exclusively milk diet it will return upon the indulgence in even a small meal of solid food.

In response to the complaints of patients and their friends who are disposed to look upon milk diet as being closely allied to starvation, he cites the case of a country gentleman accustomed to high living, at the age of 55 suffering from renal disease as the consequence of too free indulgence in the pleasures of the table. He was ordered an exclusively milk diet, which was followed out for five years. His Alderney cows gave such rich milk that he was obliged to have the cream skimmed off to avoid a tendency to corpulence. During the fifth year of an exclusive milk diet he declared that he never felt better in his life; he was cheerful, slept well and was able to take a good deal of active exercise. His usual allowance was a gallon of skimmed milk daily. After five years he gradually returned to ordinary diet. His general health for the least few years has been very fair.—*Brit. Med. Jour.* Aug. 16, '84.

Iodized Collodion for Erysipelas.—B. FRANK HUMPHREYS recommends iodized collodion as a local application in the treatment of erysipelas. It is applied with a camel's hair pencil or a feather over the whole affected surface.

He gives the following formula from *Walze's Photographic Rays of Light*, Jan. '78.

R	Sulphuric Ether	-	-	-	-	5x
	Alcohol, Absolute	-	-	-	-	5x
	Gun Cotton	-	-	-	-	5ij

Mix and when dissolved add

Iodide of Ammonium	-	-	grs. lxxx
Iodide of Cadmium	-	-	grsx4
Bromide of Cadmium	-	-	grs. x4

Mix and bottle tightly.

As the cadmium salts are often not found in country drug stores, he suggests the substitution of two drams of iodide of ammonium and two scruples of bromide of potassium for the three last articles mentioned in the formula.—*Nashville Jour. of Med. and Surg.*, Sept., '84.

Hydriodic Acid for Hay Asthma.—DR. WM. JUDKINS reports the successful cure of a very aggravated case of "hay asthma" by the administration of hydriodic acid in the form of the syrup.

Teaspoonful doses were administered every hour or two, and counter-irritation with mustard leaves to the wrists was made at the same time until relief was obtained. The effect was remarkable and the relief permanent.—*Med. Record*, Sept. 6, '84.

OBSTETRICS AND GYNECOLOGY.

Tubal Pregnancy.—PAUL F. MUNDÉ reports the case of a lady, æt. 38, mother of a child eight years old and having miscarried six years before the time when she consulted him last February to ascertain whether she was pregnant or not. Having menstruated the last week in November, she had connection immediately after the cessation of the flow, Dec. 1, and not since. The December period, due about Christmas, passed without a show, but early in January there was some bloody discharge, though much less than usual. Colicky pains began in the lower part of the abdomen and together with nausea continued and seemed to be increasing. Appetite was good, but she always vomited after eating.

When she came for examination there was a second scanty discharge of blood. She was becoming weaker, and the abdominal pain caused faintness.

On vaginal examination the uterus was found pushed somewhat to the left, but slightly, if at all, enlarged, and in the right half of the pelvic cavity there was an oblong, irregular, deeply fluctuating mass, about the size of a goose's egg, slightly movable and causing the uterus to move with it. Bimanual palpation of this mass caused intense pain and brought on faintness and the cramping pains which she had complained of. Large vessels were felt pulsating through the right vaginal pouch. The uterus measured three inches in depth.

The appearance of the areolæ and the oozing of colostrum from the nipples on pressure confirmed the diagnosis of tubal pregnancy, as these are certainly unusual in a woman who has not been pregnant for six years unless they be signs of pregnancy.

The diagnosis was confirmed by Dr. T. Addis Emmet, on the day following, and, fearing that delay might result in rupture of the sac, Dr. Mundé made an appointment to operate with the galvanic electricity that afternoon.

On calling at 4 P. M., the patient was so much prostrated that

her husband thought it would be impossible to do anything, but Dr. Mundé, dreading a rupture of the sac, decided to apply the electricity which he did by introducing a leather covered button electrode into the rectum and applying the other pole by a flat sponge on the abdomen over the mass, and passing through the sac the current of a newly filled galvanic battery gradually increasing to twenty-four cells and rapidly breaking the current a dozen or more times. The session lasted for ten minutes, and the shocks were quite painful. The patient was fairly comfortable, when the doctor left, no more prostrated than before the application.

Early the next morning the doctor was called. Nausea and retching had continued all night and toward morning, while sitting up in bed to vomit, the patient had been taken with a sudden sharp pain and fell back in a faint. She was perfectly conscious, white as a sheet, with pinched, clammy features, absolutely pulseless at the wrists, skin cool, extremities cold.

One thing only led the doctor to doubt the occurrence of rupture of the sac, and that was the strength with which the patient could turn in bed and answer questions. She was evidently in a condition of collapse; but these two circumstances made him think the collapse due to the violent galvanic shocks, passed through a highly sensitive organ rather than to intra-peritoneal hemorrhage from rupture of the sac. This opinion was confirmed by finding, on gentle vaginal examination, that the outline of the mass was as distinct as the day before.

At any rate in the condition of collapse, with pulse absent at the wrists, laparotomy, the only active measure practicable, was not to be thought of. Accordingly hypodermic injections of brandy, each one containing five minims of aromatic spirits of ammonia were ordered to be administered every fifteen minutes in different parts of the body. Some fifty in all of these injections were administered during the day.

The next morning there was a faint pulsation at the wrist, and the stomach retained cracked ice. She gradually rallied, began to retain nourishment; in two weeks the sac had become harder, fluctuation was less distinct, pulsation had disappeared, but the mass had not perceptibly diminished. Though there was no reasonable doubt of the death of the fetus after such a series of galvanic shocks, the doctor thought it best to make sure by passing a foradic current through. This was done at six successive seances, the

whole force of a Kidder tip battery being used for about fifteen minutes each time. The patient improved rapidly in health and by the end of the fourth week was able to go out.

Colostrum gradually disappeared from the breasts, but the sac diminished so slowly in size, that after three and a half months it was still two-thirds the size of the fist, though perfectly solid. All pain had ceased before she was allowed to go out.

Dr. Mundé's experience in this case leads him to give the preference to the faradic current in the treatment of such cases hereafter, though its application would have to be repeated several times in order to secure decisive results.—*N. Y. Med. Record*, Sept. 27, 1884.

The Ovaries During Menstruation.—M. MEYER has made at the gynecological clinic at Dorpat, a series of investigations by the bimanual exploration in order to determine the changes which occur in the ovaries during menstruation with reference to size, consistence and form. In some women he finds that there is an evident increase in size, in others none; the ovaries which are difficult or impossible to detect in the intermenstrual period, are sometimes readily discovered during menstruation. While the consistence of the organ is habitually firm, he describes it during menstruation as elastic and resisting. In some cases the ovary had a rounded form, but often he felt distinctly the irregularities of the organ and in one case he was able to recognize a prominence. Sometimes there were no changes; sometimes they were found on one side and sometimes on both sides.—*Arch. f. Gyn, Lyon. Med.*, Aug. 10, 1884.

BEFORE OR AFTER MEALS.—Irritants, such as the salts of copper, zinc, iron and arsenic in large doses, should be administered after meals on a full stomach. Small doses of these same remedies intended to act upon the stomach terminals of the vagi nerves must be given when the organ is empty. Remedies intended to act locally upon the stomach should be given when that viscus is empty. This is true also of remedies which are decomposed readily. Iodine and the iodides when taken fasting readily diffuse into the blood, while, if taken with food, they unite with the starch or with acids to form compounds of little activity. Medicines intended to act on the mucous membrane of the bowel should be given before eating.—*Med. Age*, Apilr. 25,

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, July, 22, 1884.

SALICYLIC ACID FOR CORNS.

Dr. Dean.—A few years ago I made a discovery, so far as I knew at least, in reference to the use of salicylic acid. I was paring a corn on my toe and for the first time made it bleed; I was paring it preparatory to putting on one of those perforated folds of corn plaster, and I was at a loss to know what to do to stop the hemorrhage as I was in a hurry to put on the stocking at once. In looking around I saw a little bottle of salicylic acid and it occurred to me that I might staunch the hemorrhage with this, as it caused no smell and I could keep it on a while. I filled the opening in the plaster with the salicylic acid and clapped over it a piece of isinglass plaster, and a few days after when I took it off the corn peeled off also very nicely. I suppose all that was necessary was to keep the corn macerated. I thought this was a very good thing if it would do the same again, and I tried it four or five times after but thought nothing more particularly of it, until a year or two ago I read in several of the journals of a use of salicylic acid and some one or two other ingredients, and collodion. I tried the same thing again and it answers equally well to allay pain.

Dr. Hardaway.—This has been used a great deal in dermatological practice. Salicylic acid used in this way, half a dram salicylic acid to ten grains of cannabis indica and an ounce of collodion is what is usually employed. The patented corn remedy which is abundantly used for corns and warts, is about the same in composition. Two years ago Dr. White of Harvard University told me that he used it very largely for warts and recommended that it be used in the treatment of scirrhus eczema where the epidermis becomes leathery, and that he used it in that way with collodion. It certainly peels off the epidermis in a very remarkable way and is ex-

ceedingly useful, in fact, in any accumulation where there is a horny condition.

FRACTURE OF LARYNX.

Dr. Dean presented a specimen and said: On Friday morning at eleven o'clock a man was brought to the hospital who was said to have fallen from a scaffolding in the Exposition Building. It is not known how he was struck; he was entirely unconscious and there were bruises about his face, but apparently no deep injuries. He made an effort almost at every breath to swallow at first, and I could find no other fracture except a fracture of the larynx. At first it seemed from the marked crepitation that the hyoid was broken, but this resulted simply from the hyoid bone and larynx grating very readily against the cervical vertebræ and the transverse process, and I diagnosed fracture of the right ala, because it moved so much more freely than the other. He had a curvature of the dorsal spinous processes, very prominent, but this was apparently old, and there was what we thought to be a depression of the cervical vertebræ, but I concluded it was simply compensatory. I learned after that this man had had curvature of the dorsal vertebræ for years, having been hurt when he was a child; he also had a deformity of the right eye which had existed for years. We kept the man under close observation, expecting trouble, and thinking we should have to perform tracheotomy, if he lived long enough to make that necessary, and in the evening at half past seven of the same day we found it necessary, in order to prolong his life at least, although there seemed to be no chance of his recovery. There was a spasmodic movement of the larynx during respiration; he breathed passably well except that a secretion collected which filled his mouth as well as the larynx and trachea. Friday afternoon he came in. On Sunday morning about eight o'clock he died, and as it was an accident case with nothing criminal about it, the Coroner, not being authorized in those cases to make the post-mortem at the city's expense, allowed me to make it. The parts were very movable at the time of making the post-mortem, but I put the specimen in carbolic acid, as I had no time to attend to it, and they are now contracted very tight; the opening is not exactly in the median line. I found a fracture of the right ala just at the left of the depression and turned toward the median line, but the right wing moved over the left so easily that it was supposed to be the part that was fractured.

Dr. Prewitt.—Was the motion made by the rubbing of the larynx and hyoid bone against the vertebra? Was there any denudation?

Dr. Dean.—No denudation, but at the same time it is very easy to be mistaken in these matters. This is the only case I have seen in so young a man. The crepitus was very readily produced against the transverse process of the cervical vertebrae, and could be elicited also after making the opening; you could hear it then. There was no extravasation; no emphysema, no great amount of edema, about the neck.

Dr. Todd.—We would expect that a part would be calcified; hence the cause of fracture which is at that place where the thyroid cartilage is most frequently ossified, in the median line. I recall that some years ago while assisting a prominent surgeon in this city to perform laryngotomy, coming to the thyroid cartilage he found that the knife would not go through, and did not know what was the matter. I suggested that probably he would have to use the forceps to cut through. He couldn't cut through it with a knife; it was solidly calcified. The patient was a young man not over thirty. The calcification of course facilitated the fracture. I would like to ask the doctor if he can explain why that fracture was without any appearance of external violence.

Dr. Dean.—There are external appearances about the neck; there was no abrasion or anything of that sort. He fell head first, and in some way might have caused the injury through muscular action; I cannot say about that. As to the matter about which we were just speaking, of calcification, while we would expect to have fracture occur in old people whose thyroid cartilages have been calcified or ossified, I believe the statistics show that the majority of cases are in persons under thirty; it might very easily occur by the head being brought down against it; the lower portion is a little ragged.

Dr. Prewitt.—I think Dr. Dean was quite right to perform tracheotomy; in fact, experience and statistics go to show that a much larger number of cases of fracture of the larynx recover where tracheotomy has been resorted to than where the chances have been taken otherwise. The condition is such as to demand tracheotomy where fracture of the larynx has taken place.

SYPHILITIC CEREBRAL LESIONS.

Dr. Funkhouser.—I present a specimen of a diseased brain taken from a man who died of syphilis. This is in my opinion an example of lesion of the brain occurring on the same side on which the paralysis occurred. I was called to see the patient in January. He was then troubled with paraplegia. For awhile he was unable to pass water and defecated with difficulty. He improved rapidly after five weeks' treatment with iodide of potash and bichloride of mercury and resumed his business duties. In the spring he went to Hot Springs. After six weeks' treatment there he returned, supposing he had been completely cured. About the middle of June I was called to see him again. In the mean time he had occasionally come to me for advice which subsequently I discovered had not been carried out, viz., to take 120 grains of iodide of potash a day. For several days before I saw him he complained of pain in his head which when I saw him was intense; at this time his left side was paralyzed he was unable to move his left leg or left arm, and his left eye was also affected. There was a good deal of chemosis and swelling of the lids, and it was feared at one time that there would be sloughing of the tissues, and complete loss of the eye, which happily did not occur. Under the immense doses of 420 grains of iodide of potash in 24 hours he improved to such an extent that he was able to move his left arm and left leg and also speak coherently, which he had been unable to do during the beginning of this attack. His tongue, which had been drawn to the side on which the paralysis occurred, the left side, resumed its normal position. On the first of July I saw the patient, when he informed me that he was not going to take any more potash, that he would rather die than do so, and would cease taking the mercury. He was abetted in this idea by his brother, who was nursing him. I told them I wouldn't treat him in any other manner, and recommended him to go to some other doctor, which he refused to do. I told him very likely he would continue to improve, but it would be only temporary unless he continued to take medicine. By this time he was able to go about the room by aid of chairs and did subsequently walk out. I was called to see him again on the 11th of this month. I found that 24 hours before I came he had been suddenly stricken down; it was supposed that the attack was very sudden, as a gentleman friend of his had been to see him ten minutes before. The gentleman had hardly left the house before a noise was heard, and upon running

up stairs he was found unconscious. The other side was paralyzed, the right side, the right arm and right leg. Of course on making an autopsy I expected that the lesions, the most prominent or principal lesions would be in the left brain, but, on the contrary, it was in the right, on the side on which the paralysis occurred. I found also in the post-mortem that along the inner surface of the skull in the region of the superior longitudinal sinus, the dura mater separated from the skull with very little difficulty, and there were adhesions between the dura mater and the brain, and here and there over the surface of the anterior portion of the brain were found these little threads. We found also these Pacchionian bodies. The lesion extended to that portion of the white matter of the brain between the anterior and middle cornua of the lateral ventricles, and just external to the corpus striatum, and seemed to encroach upon it and would correspond to a line let drop through or in the region of the fissure of Rolando. These are portions of the brain that looked rather curious to me when I made the post mortem. This is from the temporo-sphenoidal lobe. The man was 39 years old. I will state that the patient has a history of syphilis. When I saw him he had no secondary trouble. From July 1 to the time I was recalled the patient had not taken any medicine.

Dr. Prewitt.—Dr. Funkhouser speaks about the peculiar fact that there was paralysis on the same side as the lesions, but he also tells us there had been in the first place paralysis on the left side as well as on the right. As a matter of fact I think there is evidence of lesions at more than one point. There are other lesions in the brain which account for the paralysis at different points, and the paralysis on the left side may be due to the lesion which we see there, and the paralysis upon the right side to some other lesion. It is true paralysis of the brain on the right side was the last manifestation, and this is certainly the most advanced of the lesions; still there is so much disease of that brain that it is difficult to say what lesion produced the different attacks of paralysis. I don't think it could be cited as a case of paralysis upon the same side that the lesion occurred, since there are too many lesions—lesions upon both sides. Evidently there are portions of the brain upon the left side diseased as well as upon the right, and some of the cortical portions which the doctor exposed are certainly not normal. He speaks of a fact that is certainly rather remarkable, although not uncommon in cases of syphilization of the nervous system, that is the absence of exter-

nal manifestations of syphilis on the body, the falling out of hair, and so on. It has been observed that where syphilis attacks the nervous system the other manifestations are often absent. I don't mean to say that they never have occurred, but that at the time the nervous system becomes involved these symptoms usually have disappeared.

I recollect having had a case at the City Hospital a number of years ago, a woman who had aphasia in a very marked degree: she was constantly trying to tell something but never could speak or write a word. She improved under the use of iodide of potash, but perhaps it was not given persistently or in as large doses as I should certainly give it now, and she was therefore taken suddenly worse and died. On making the post-mortem I found in the left anterior lobe a large mass of gummatous material with softening of the brain. She never had any paralysis.

Dr. Funkhouser.—I perhaps didn't make myself clear, but when the brain was examined a few hours after the post-mortem the difference between the two lesions was so marked that it was apparent to those that were present at the autopsy, that on the left side being comparatively slight, there was very little softening, very little broken down material. The appearance of the brain on that side indicated that a process of absorption had gone on, and the material, the gumma, had almost disappeared, while that on the right side was marked, presenting more the appearance of softening of the brain that we have in other cases, in other conditions. What was peculiar in this case, as I said in my first remarks, was that he had entirely recovered from the attack affecting the left side, so much so that he was able to walk. The grasp of the hand was firm and he appeared to be in full possession of his powers. After he had recovered from this attack on the left side, he then had the other attack, and it was well marked on the right side. It is very true that we find both sides of the brain are diseased and the disease is more marked on ones ide, it is very well shown, well defined on the right side. I was convinced and feel convinced now that had the patient kept on with the use of the iodide of potash he would be alive to-day, as it acted very happily in the first attack of paralysis and in the second, but he began to take the iodide of potash too late after the third attack of paralysis, viz., when he was paralyzed on the right side.

Dr. Prewitt.—Is it your impression that the paralysis occurred on the same side upon which the lesion existed?

Dr. Funkhouser.—My impression is that the paralysis on the left side was due to the lesion on the left side of the brain. He entirely recovered from that. Then he was able to use both legs and arms for two weeks. He ceased taking the iodide of potash about twelve days before the last attack or the attack in which the right side was affected. Brown-Sequard has collected 200 cases of paralysis on same side as the disease of the brain. If such a lesion can be shown to have existed, it should be regarded as ample proof. The case of Morgagni does not admit of doubt. Brown-Sequard, however, tries to prove too much when he disputes, on the authority of his cases, the crossed-action of the brain. Ferrier reviews the matter in a very satisfactory manner. He says the true view of looking at this subject is based on the researches of Flecksig and Pierrot. The former states that the pyramids are an adjunct to the fundamental spinal tracts and always developed at a later period than the others. Their development coincides with that of cerebral hemispheres and they are absent in non-development of the hemispheres. Their connections can be traced above into the cortical regions bounding the fissure of Rolando and below the postero-lateral, and partly with the internal aspect of the anterior columns of spinal cord. The pyramidal strands are subject to very considerable variations in respect to their decussation at their anterior-inferior part of the medulla oblongata, and as to the relative proportion of the fibres which proceed down the postero-lateral and antero-lateral columns respectively. As a rule most of the fibres of the pyramids descend on the postero-lateral column of the cord on the opposite side; the rest on the antero-internal of the same side. Occasionally, there is a reversal of the rule. He reports a case in which there was no decussation at all. The case in point is one of these. The strands which are subject to this variation are those which are affected by the lesion of the motor centres, and the evidence is most satisfactory that they are the paths of voluntary motor impulses. If this be so, then we must accept paralysis on the same side as the cerebral lesion, unquestionably, as a possible event.

Dr. Post.—I would like to inquire what he means by speaking of the suddenness of this last attack. Is it to be understood that there were no premonitory symptoms at all?

Dr. Funkhouser.—After the visitor went down stairs the patient was suddenly seized with paralysis, and he was found in that con-

dition. I do not know what the cause of the paralysis was, unless it was due to a certain amount of excitement. The excitement may be presumed from the condition he was in when found. He was, perhaps, trying to get to the water-closet, having made a great effort to open the door, and was paralyzed. When he was picked up it was found that his clothes were soiled.

Dr. Post.—These changes of the brain were certainly gradual in their development, and the question is whether the attack of paralysis was due to these gradual changes, or to some change, effusion or otherwise, and if due to effusion, at what point the effusion would be located.

Dr. Funkhouser.—There was no effusion that I could see. I found none in the ventricles. I found outside what I took to be material that had escaped from the blood-vessels. When I cut into the brain I found none. This patient had complained, prior to the second attack which occurred last month, of pain in the middle antero-posterior portion of his head; sometimes it would get better and again grow worse.

Dr. Post.—The point I made was whether there was any gradual change on the side of paralysis?

Dr. Funkhouser.—No, sir; there was not. The stroke of paralysis occurred on Friday. I saw him Saturday and he lived until 5 o'clock, on Wednesday, September 16. Twenty-four hours before he died he could not move either leg or arm.

Dr. Steele.—It has been suggested, perhaps by Dr. Post, that if the trouble was due to syphilitic lesion it was strange there had been no premonitory symptoms.

Dr. Funkhouser.—It depends on what we call premonitory symptoms. He had paraplegia in January; after recovery he complained that he did not feel as strong in his legs as he had before the attack. During the attack in June, in which the left side was paralyzed, he could use his right leg and right arm; he recovered from this attack and could walk about, but, as I mentioned, he couldn't go very rapidly. I do not suppose he had recovered entirely and absolutely from the first attack in June. I do not consider that sufficient time had elapsed for the brain to resume its normal healthy condition. I do not mean to be understood as saying that the patient in question previous to the attack looked or was as well as a man suddenly stricken down by an apoplectic stroke. He was able to walk around the room and was sitting up a few minutes

before the attack, conversing intelligently with a visitor, and had moved himself from one part of the room to another when suddenly he became unconscious. It was found he was paralyzed on the other side. He had complained of pain in his head for perhaps five or six days. It did not become intense until two days before the attack, but then when the June attack of paralysis occurred he did not lose consciousness entirely. About the fourth day of the paralysis he acted like a man dazed, but when aroused he seemed to realize his condition. He recovered from this attack. On July 1, and after, he did not complain of the pain in his head, though he may have experienced some.

Dr. Prewitt.—It doesn't seem to me that we are obliged to attribute the paralysis to the lesion which we see there, it may have been due to some other condition. Some months ago I saw a man who had had syphilis, and he was paralyzed; and yet upon making the post-mortem there was no softening of brain and no gummatous tumors that we could find. The only thing we did find was occlusion of the basilar artery which became sclerosed. There was more or less hyperemia; there was effusion, and paralysis from that cause. There was no lesion of the kind that we see here, and it does not necessarily follow that paralysis upon the left side is due to the condition which we see there. If there was nothing else in the brain we might conclude that such was the case, but that brain is excessively diseased, and I do not think it can be said that this is one of those cases where we have the lesion of the brain upon the same side that the paralysis occurs. Claude Bernard has shown that. Those cases occur more frequently than we suppose, but it is not the rule. The suddenness of the attack was due probably to collateral hyperemia or edema.

Dr. Tuholske.—I would like to ask Dr. Prewitt a question in regard to occlusion of the basilar artery; what was the condition?

Dr. Prewitt.—There was a condition something like an atheromatous or fibrous degeneration; I have never examined it microscopically.

Dr. Tuholske.—I remember having seen just such a basilar artery where the closure was undoubtedly of this form. These cases are remarkably rare, and it is interesting to keep track of every one of them. It is said that this condition is due only to syphilis and where it occurs we can be satisfied that syphilis is present, and is the cause of the trouble.

When paralysis occurs from syphilitic lesion of the brain, it is always gradual, that is the patient will for some hours previous to the attack appear to be drowsy, have numbness of the extremities, may be of the arm, or he will wake up in the morning and find himself unable to move his leg. That may pass off, but it will recur during that day until within ten, twelve or twenty-four hours the paralysis will be complete. The attack does not come suddenly like apoplexy.

Dr. Funkhouser.—It was noticed when the brain was cut into that there were only two lesions in this brain that could be attributed to syphilitic change, one on the left side not quite as large as a quarter of a dollar, which was not very distinct. The redness had faded to a faint copperish color, that on the right side was pronounced and as large as a half-dollar. So far as I could determine, there were only these two places, and they were situated in similar parts on each side, just outside of the corpus striatum and between the anterior and middle horns of the lateral ventricles.

Dr. Mulhall.—I do not think this or any similar case affects the laws of ordinary paralysis. I think the history of this case goes to show that the nervous system may be so affected as to cause paralysis of the lower extremities even before lesion of the brain appears. Some years ago I was called to see a lady who had been sick for some little time, had lost her memory and was not disposed to care for anything or anybody. She had a little grand-child that she was formerly fond of petting, but she paid no attention to her. There were no external manifestations of syphilis whatever, and I could get at no history; but fortunately I called in Dr. Bauduy in consultation. After he heard the lady's name he said to me in the consulting room, "I treated her husband for syphilis and he is dead." So we immediately put her on iodide of potash and she got well and she is perfectly well to-day. There was no manifestation or general symptom of this disease in this case.

CEREBRAL SYMPTOMS OF IODISM.

Some four years ago, I was called to see a man in this city who was suddenly attacked at dinner while eating soup; all at once his spoon fell from his hand and he was stricken with paralysis of the right side. He afterwards got partially well, but had another stroke and died. There is no doubt about this case being syphilitic so far as the history is concerned.

I wish to mention a case of disease of the brain not syphilitic, but which might be mistaken for such. Whenever we speak of tertiary syphilis, we always speak in the same breath of iodide of potassium. A gentleman came to me about a month ago with tertiary syphilis involving the mucous membrane covering the hard palate. I began with 10 and increased to 15 grain doses of the iodide of potassium. He seemed to improve very rapidly and got well. In some three or four days after he got well, he continued to take the medicine, I was sent for to see this gentleman who was very much alarmed. He said, that in coming home from business he had been attacked with a ghastly paleness and a cold sweat; that his limbs felt shaky and he was obliged to go to bed. When I arrived he spoke in a low tone of voice and said he could not speak any louder. He also stated that in coming home one side moved very differently from the other; that he found a great difference, one side being stronger than the other. Of course I thought that possibly he had some syphilitic lesion of the brain, but I thought it strange that this tertiary ulcer should appear to heal and get well under the influence of iodide of potassium; and I came to the conclusion that he was getting iodism of his brain rather than syphilis, and my conclusion proved correct. I told him to cease taking the remedy, and in thirty-six hours he was himself again. It appeared that the iodide of potash had deprived him of his appetite and he had only eaten one meal that day.

Stated Meeting, August 5th, 1884—DR. MULHALL in the Chair.

BURN OF FACE—PLASTIC OPERATION.

Dr. Prewitt.—With the permission of the Society, I will show a patient who was burned last January. The left side of the face was burned, involving the eye lids so that both were badly everted and the ball left exposed, the upper one so that the lid lay along the border of the eyebrow. When I first saw her the burns had healed and cicatrized to a very considerable extent, but there was still some ulceration, and in view of the constant exposure of the eye, I thought that I would first raise the lower lid, and later, when the parts had become more cicatrized I would endeavor to make a new upper lid. I made a triangular flap below and raised it up as I thought amply, carrying the point fully an inch up. I found that the cicatricial tissue was very unyielding and caused a slight sub-

sequent contraction and a partial eversion of the lid again. I would not have attempted the operation so early, had it not been for the necessity of doing something to protect the eye-ball. The result in this case is as satisfactory, perhaps, as could be hoped for. If the lower lid was well up she could close the eye and protect the ball thoroughly. The operation has left a very small scar. After removing the flap, I put in sutures and drew the parts together as thoroughly as I could, and it united in the greater portion of its extent by first intention. I have not yet removed the redundant portion; I intend to do so and add a little to the symmetry and appearance of the part, but the lid answers a very good purpose. When you recollect that the lid was completely everted, that the margin of the cartilage was in contact with the eyebrow almost throughout its whole extent, you will appreciate the extent of the suffering and the difficulty which had to be met in making a new eyelid.

HYDATIDS OF LIVER.

Dr. Carson.—I have a specimen which may be of some interest—a case of hydatids of the liver of an immense size, the liver extending as high as the second rib above, and below nearly to the crest of the ilium and displacing all the organs of the chest as well as those of the abdomen; pushing the heart away over to the left side; compressing the lung upwards. This patient came to the St. Louis Mullanphy Hospital and entered Dr. Glasgow's ward in the early summer last year. A diagnosis of hydatids of the liver was made by Dr. Glasgow and the patient was advised of the necessity of an operation. He would not consent to it, however, and Dr. Glasgow made several punctures with the aspirating needle which caused inflammation to follow, and from which I believe the patient came near dying. He recovered from this and went from the hospital considering himself a well man. He returned some time in the summer, when it was found that the size of the liver had increased very much. After his entrance into the hospital it continued to increase until it had attained the size I mentioned a few moments ago. He would not consent to have anything done, however, until last Friday, when his condition became desperate. The risk and chances were explained to him, and he consented to have the operation performed.

Before opening the abdomen I introduced a small sized aspirat-

ing needle into the cavity of the cyst, but failed to get fluid. This was then withdrawn and a large trocar introduced. About a tablespoonful of yellow, jelly-like material came through. The cannula—then the opening—became plugged. On withdrawing it a portion of a cyst-wall exuded. This was seized by means of a pair of Spencer Wells forceps and the opening freely enlarged with a blunt-pointed knife. The walls of the abdomen being pressed a number of ruptured cysts and a quantity of fluid mixed with a thick gelatinous material escaped. The abdominal walls were then opened by an incision two and a half inches in length and the contents of the liver emptied. This consisted of a yellow fluid, cysts, many unbroken, and a mass of colloid material. We obtained nearly as much more fluid as we have here in this bottle, altogether about two gallons; after this the walls of the cyst were sewed to the abdominal walls by means of continuous sutures; the abdominal walls were closed and a drainage tube introduced and dressings applied. The patient did not react well, and his condition was very bad until Saturday evening, when reaction set in, and he improved until Sunday evening, when, as he desired to evacuate the bowels, he requested the sister to leave the room, and the nurse who was new to the business allowed him to get out of bed. I saw him shortly afterwards and he was then very much weakened from the effort and died on Monday evening—yesterday—at seven o'clock. I think if he had been operated on two weeks ago, when we proposed it, he would have survived. There was no inflammation following the operation and he died from exhaustion. I have no doubt that if he had permitted the operation at the time he was first tapped he would have recovered, because then we did not have nearly so large a cyst to deal with, a great portion of the liver not being involved at that time as it was when the operation was performed. On the whole at that time his condition was very favorable for the operation.

Dr. Glasgow.—The patient entered the hospital last July. He then complained simply of a fullness in his side and later of pain in the back. His case had been diagnosed as abscess of the liver, but there were no symptoms or history of abscess. He had had no fever or any symptom usually seen in suppuration. There was no enlargement of the abdominal cavity at that time, the enlargement seemed to be altogether upwards, and I thought we could exclude the other diseases in which the liver is enlarged. The liver

was aspirated principally to verify the diagnosis, partly in the hope that by setting up an inflammatory action we would destroy the vitality of the cyst. I think the aspiration did a great deal of good. He had a slight peritonitis with great prostration after the punctures, and we thought at one time that he would die. At the time of making the punctures there was drawn off simply a table-spoonful of whitish turbid fluid. This was examined microscopically by my brother, Dr. Frank Glasgow, and he could find no hooklets in it. I tested it and found no albumen. The fluid, however, was pathognomonic of hydatid cyst and confirmed the diagnosis. The punctures in the abdomen were all made over the lower margin of the liver.

He recovered from the first shock and seemed to improve a great deal. The size of the chest diminished and the pain in the back, which I considered due to pressure, entirely left him; he improved so much that he considered that he was going to get well, and left the hospital. He stated that during the winter he was in a very good condition, and in fact he was so much improved, that at one time he made a walking trip of 24 miles in a day. He worked all winter, but in the latter part of June his side began to trouble him again, and he began to complain of pain in his back. He had also a slight dyspnea on exertion.

In June he entered the hospital again and I found great enlargement of the side again. The liver was enormously enlarged and there was no question but that some operation had to be performed. Some ten days before the operation it increased very rapidly, so that it began to interfere with respiration and he was obliged to be propped up in bed. He had up to this time sat up in a chair most of the time. I felt satisfied at that time that he could only last a few days without an operation. He did not suffer any marked pain, but seemed to be slowly dying from exhaustion. I repeatedly percussed over the liver but was never able to obtain the hydatid fremitus.

Dr. Prewitt.—Where was the first puncture made?

Dr. Glasgow.—About an inch and a half to the right of the median line. We made three punctures, and when we made a puncture about the fourth rib the fluid came away.

Dr. Frank Glasgow.—I examined the fluid from one of the perfectly clear bladders and found albumen in it. I did not examine the fluid removed last summer for albumen, but the fluid which I

examined which was removed this summer had a very perceptible quantity of albumen in it. The fluid removed last summer was simply milky in appearance and contained no hooklets. The fluid that I examined from one of these cysts contained no hooklets; I searched very thoroughly for them; I subsequently found hooklets in the contents of one of the cysts and in addition there are a number of bodies the character of which I do not recognize. They resemble white blood corpuscles; they may be ova, but if ova are ever found in this region I have never heard of it; then again there was a very small organism shaped almost like a cornucopia and there were radiating fibres looking as if they might be very minute hooklets; these were arranged in a position radiating from the centre of the large end. But the other bodies I do not recognize unless they are ova. The specific gravity of the liquid is 1010.

Dr. Carson.—I don't think it is anything unusual not to find hooklets or cysticerci in the fluid, as many of them are barren.

Dr. Prewitt.—Did Dr. Glasgow make the diagnosis in the first place from the fluid.

Dr. Glasgow.—No, sir; I made the diagnosis from the physical examination of the liver combined with a due consideration of symptoms, history and condition of patient; there was an utter absence of all symptoms pointing to a suppurative inflammation, and there was general good nutrition of the patient; his muscles were firm and well developed; he seemed to be well nourished. The diagnosis, in my opinion, lay between abscess and hydatid cyst. The other morbid conditions of the liver could be excluded.

Dr. Carson.—I think these cases are exceedingly rare. I have heard of only two or three in the city. Several years ago in the dissecting room I was called to see a liver affected with this trouble. The liver was exposed and cut into by some of the students on account of its size, but not recognizing the condition, I was asked to look at it, and we recognized then a hydatid cyst of the liver. In that case the cysts were not free but were attached to the wall—at least the cysts were attached to each other and to the wall, giving more the appearance of a bunch of grapes closely attached together; within this were found quite abundant cysticerci which floated free in the fluid of the cysts; the hooklets in that case were uncommonly abundant.

Dr. Prewitt.—The rarity of these cases, of course, would of itself make the diagnosis often times difficult; but I believe the diagnosis

would be difficult in any case; and that in some cases it would be impossible almost, except by an examination of the fluid. Now as Dr. Glasgow has stated, one could in this case have excluded abscess of the liver because none of the symptoms of abscess of the liver were present; he could have excluded carcinoma, because none of the characteristics of carcinoma were present; but I don't see how he could exclude an ordinary cyst of the liver without an examination of the fluid. In ordinary cyst of the liver, the fluid is yellow, albuminous; in the hydatid cyst it has no albumen; both are strongly saline and usually clear; but it is only the fluid of the hydatid cyst that is absolutely free from albumen; Dr. Frank Glasgow says the specific gravity of the fluid was 1010. I do not know why it had the color he speaks of unless there were some changes going on in it.

Dr. Glasgow.—In answer to Dr. Prewitt as to the diagnosis, I think the question in this case lay between abscess of the liver and hydatid cyst. I think that the general condition of the liver, its enlargement and absence of symptoms as well as the general condition of patient excluded all those diathetic conditions and those conditions which are common to a cachexia. Now if it had been a simple cyst of the liver we would not have had the general enlargement; we might have had a partial enlargement; and we would not have had the symptoms of pressure. It was this general upward enlargement which at the first examination, before the puncture was made, made me think of a pleuritic effusion; I do not think a simple cyst of the liver ever produces a general fullness of that size; and besides simple cysts of the liver are even rarer than hydatids. I account for the small amount of fluid taken out with the trocar at the first aspiration on the theory that the trocar punctured a small cyst and emptied it and then the cyst wall or some of the solid contents blocked up the point of the aspirator.

Dr. Prewitt.—I do not see how the doctor could exclude a cyst of the liver on that ground. My understanding of the matter is that ordinary cysts of the liver may be very large; and then again hydatid cysts usually appear upon the surface of the liver and around the lower margin and project downwards in many cases. In this case it did not project below the margin of the liver to any extent at the outset. I do not see how the doctor could exclude a simple cyst of the liver. I certainly think an ordinary cyst of the liver

would have produced the same symptoms, if it had been large enough; and I know of no reason why it might not acquire the same size as a hydatid cyst as far as that is concerned; and I must say I don't see how it is possible in the majority of these cases to make a diagnosis between simple cyst of the liver and hydatid cysts except by aspiration and an examination of the fluid.

Dr. Glasgow.—I agree with Dr. Prewitt thoroughly that a positive diagnosis in these cases is somewhat precarious and sometimes impossible; but I disagree with him when he says that in hydatid cyst of the liver the enlargement is always downward. I think that can not be borne out by statistics. In cases of hydatid cyst of the liver the enlargement is usually upwards, and it is one of the points to be considered in making a differential diagnosis between it and other conditions. The right lobe is the most frequent site.

Dr. Carson.—Hydatid cysts are mostly found on the right side and may grow upwards as well as downwards. So far as simple cysts are concerned I think they are very rare; I do not believe that simple cysts of the liver ever attain the immense size that is attributed to them. I think they are exceedingly rare and can be excluded. Cysts of the liver are generally due to dilatation of the biliary ducts.

CEREBRAL LESIONS.

Dr. Funkhouser.—I wish to make a correction in my report of the case at the last meeting. I stated then that I presented portions of the right and left cerebral hemispheres. I will state that I did not present the left cerebrum at all, but only the right. Those who prepared the specimens failed from some misunderstanding to place in the vessel parts of the left cerebrum. They thought the appearance of a lesion was so slight as to be of no importance.

HYPERTROPHIED HEART.

I have here another specimen and one which is of considerable interest. This is a specimen taken from a patient who died from hypertrophy of the heart. The exact cause of death I do not know, as I had not seen the patient for two weeks prior to his death. The heart weighs a trifle less than three pounds. The patient was sixteen years old and the development of this hypertro-

phy I take to be indirectly the result of rheumatism. I take it that there was first rheumatism, then pericarditis with infiltration; next dilatation, and finally hypertrophy. The pericardium was entirely obliterated; in other words, there was adhesion of the visceral and parietal layers of the pericardium. During life the shock, the *pulsatio epigastica*, was very pronounced. There was heard the *cliequis metallique*, a peculiar metallic sound during systole. The impulse had very great intensity. There was present in the case one of Skoda's degrees of abnormal intensity in which the thoracic wall was distinctly elevated during the systole and sank with the diastole. This heaving cardiac impulse extended over a large area of the thoracic wall; besides the jarring was constant—extending over several intercostal spaces, both longitudinally and transversely. The apex corresponded to the eighth rib. I found upon making the post-mortem there were adhesions between the pleurae of both lungs and pericardium. I found here a pouch which I take to be the remains of the auricular appendage. At the time I saw the patient he had been suffering for some time with rheumatism; had dyspnea and cyanosis; there were also symptoms of pneumonia and pleurisy and pericarditis. I found there was considerable dropsy present and kidney complications. His legs up to the knees and the feet were edematous. I found casts and albumen in the urine. He had as many as three attacks after he came under my care.

Dr. Glasgow.—How long was it from the time of the attack to his death?

Dr. Funkhouser.—I first saw him the latter part of April or the first of May. At that time I noticed heart complications and evidences of renal trouble. He improved and I did not see him again till December, when he suffered from pleuro-pneumonia and pericarditis. There was enlargement of the heart in December, when he had the last attack of rheumatism, but it did not increase to anything like this size until last February, when I saw him again and I could then notice the decided heaving of his chest.

Dr. Prewitt.—Do you attribute the hypertrophy to the adhesions that were present?

Dr. Funkhouser.—Well, no sir; I don't attribute it to the adhesions; I attribute that to the action of the heart after it became dilated; there was an effort on the part of nature to compensate for or to repair the dilatation.

Dr. Glasgow.—In examining this heart the chief point of change from a normal heart is found to be the hypertrophy of the left ventricle. There is no valvular disease. As a result of rheumatic endocarditis, we find most frequently a lesion of the mitral valve with a resulting enlargement of the right ventricle; we never find great enlargement of the left ventricle in this condition. A partial enlargement is at times met with in old mitral regurgitation. The doctor mentioned the fact that there was disease of the kidneys, and I should rather assume this condition of the heart to be one of those in which we have a hypertrophy of the left ventricle, the result of a disease of the kidneys. We find here no change about the aortic orifice, we find no change in the aorta and there must be some cause for the hypertrophy of the left ventricle. The hypertrophy is too massive to be caused simply by the pericardial adhesions. I think this is one of those cases of hypertrophied left ventricle due to Bright's disease.

Dr. Funkhouser.—Sometimes we imagine there is mitral trouble, but when we make an examination of the heart after death we don't always find it. I thought there was mitral trouble in this case during life, but I did not find any on examination after death.

Dr. Prewitt.—I would suggest that in cases of overaction of the heart in connection with disease of the kidneys a chronic condition of the kidneys usually exists, and this is a rare condition in young subjects. We rarely find chronic granular kidney in a patient under thirty years of age, and unless there is some evidence of the existence of persistent disease of the kidneys, it seems to me it would hardly be the sequence of events to assume that the heart trouble was due to kidney trouble in so young a subject as that.

Dr. Funkhouser.—I was unable to procure the kidneys; I had a limited time to make the post-mortem, and the relatives regretted afterwards that they had permitted me to make the examination. I introduced my hand and arm into the cavity of the abdomen and tried to sever the left kidney from its attachment, but was unable to do so. I felt it and it seemed to be only about the size of a goose egg; hardly so large and was quite firm. It seemed to me to be contracted.

Dr. Carson.—In regard to young subjects not contracting chronic kidney trouble I will say that some years ago I was called upon to attend a young woman, I have forgotten her age exactly,

but she was not more than 13 or 15 years of age, and I found that she had an acute nephritis. She had all the symptoms of an acute nephritis. These passed off and she apparently recovered, regaining perfect health, although she never regained her original color—she was always pale and had a bloated look, but so far as the urine was concerned nothing abnormal could be discovered. She married and I lost sight of her until I heard of her death. The physician who attended her afterwards spoke of her and said she was pregnant and that it would be necessary to induce an abortion on account of the kidney condition. She died with all the indications of chronic Bright's disease. She was about 22 years old when she died.

AMERICAN SOCIETY OF MICROSCOPISTS.

[We regret exceedingly the delay in presenting this interesting account of the meeting of the American Society of Microscopists so kindly prepared for us by Dr. Dean.]

Mr. Editor: Agreeably to your request, I send you a few notes concerning the meeting of the American Society of Microscopists held in Rochester, N. Y., from August 19 to 22.

Mr. H. F. Atwood, President of the Rochester Academy of Science, gave a graceful and appropriate address of welcome in behalf of the scientific societies of the city. He is one of forty who organized the American Society of Microscopists in Indianapolis, six years ago. Though many thought such a society not needed and that it would not succeed, "the society," he said, "is a recognized power in the scientific world and is not seeking admission now to any society as a subsection."

Mayor Parsons of Rochester gave a well written and cordial address of welcome on the part of the city.

Hon. Jacob D. Cox, of Cincinnati, Ex-Governor of Ohio, President of the Society, made a brief rejoinder in its behalf. He reiterated—which might at first seem superfluous at this day—the *raison d'être* of the society; and, in speaking of the opposition the society had met on the ground that microscopy belongs to all branches of science and should not be isolated as a department, he laid emphasis on a reason for the existence and perpetuation of such a society that I think most of us who call ourselves "working

microscopists" entirely overlook and need to revise our views upon. For myself, I confess to an awakening. Not to mention former personal work or later work, meantime, on parasitism in disease, little of which I published, I believe mine, in 1866, in the Humboldt Medical College of our city, was the first chair of normal and pathological histology on this side of the Atlantic. Drawing largely from German sources—as we shall long continue to do in matters of original investigation—and considering Hartnack, with its simple *beleuchtungsapparat*, the acme for histological "work," the mere sight of elaborate stands and accessory apparatus or the mere mention of diatoms—for it is usually from amateurs and not naturalists—and of what an instrument will resolve under certain conditions, has aroused in me the self-complacent feeling that the possessor ought to procure a "working instrument" and do a little "work." I found myself in a plenty of good company, in this respect; and in considerable measure it is true that those who are constantly harping about the microscope are, commonly, not producers in microscopical studies. But, as President Cox pointed out, while workers use the microscope in all the specialties, there must be those to know and perfect the instrument and methods for all work and for every specialty, and the meetings of such a society furnish a common ground where all may learn and contribute, and go back better qualified for working even in their own specialties.

Of whatever little value costly accessory apparatus and "wide angles" may have proved in ordinary histological work, the study of the *Schizophytæ* or bacteria, which has come to stay, as the work of naturalists, physicians and hygienists, for years, will require every help of every kind the best methods and the microscope of the best possible construction can furnish. And this society, in concert with the Royal Microscopical Society of London and other societies of the kind, will do much in the coming years toward increasing the number of workers and the perfection of methods and instruments.

After the election of some thirty new members (a large addition was made to the membership during the meeting), the Rev. W. H. Dallinger, President of the Royal Microscopical Society of London, and Alfred W. Bennett, the botanist, a member of the same society, were presented by President Cox, as delegates from that society, and given seats upon the platform. Each gentleman made a brief

address full of pleasant points and greetings, and expressing the heartiest interest of the English organization in the American society. Prof. Bennett read a paper on vegetable growths found in sewerage effluents, the so-called "sewage fungi," that appear to have the power of extracting sulphur from decomposing organic matter and from the mineral sulphates in solution. Many papers of varying interest were read during the sessions, of which it is impracticable to give a synopsis or even the titles in these notes.

On the evening of the first day, President Cox delivered his annual address in the City Hall. It was very able, showing much labor, knowledge and research, occupying an hour and a half in delivery, and giving a critical and historical account of the Tolles-Wenham controversy over the modern wide-angled lenses practically introduced by Tolles. The address met the approval of the entire audience, apparently, even the openly expressed approval of Dr. Dallinger, and will be read by the scientific world as a proper estimate of the debate, a glowing tribute to the deceased Tolles, and a fair dispassionate recognition of his practical triumph for science.

Wednesday evening the society, and friends of members visited the optical works of Messrs. Bausch and Lomb, and saw in detail the processes of making eye-glasses, and the various styles of microscope-stands, eye-pieces, objectives, accessory apparatus, and other optical instruments for which the firm is becoming justly celebrated. The visitors then adjourned to a large tent on the grounds, where ample refreshments were served and many pleasant toasts were responded to. Dr. Dallinger especially hoped the English and American Societies would make a thorough study of zymotic diseases to rid the world of them.

Friday afternoon was occupied with the working session under the zealous and efficient direction of Mr. E. H. Griffith, of Fairport, N. Y. Here one could find in a nutshell the methods pursued by the workers; and the society, very wisely, I think, voted to retain this feature in some form during the coming year. In the evening was the soirée in the State Arsenal, given to the Society and its friends by the Academy of Science. There were 125 tables, 252 microscopes and more exhibits in the spacious hall, and at least 2,000 visitors. There can be no doubt that the soirées are of much interest to non-expert citizens in the cities where the meetings are held, and instructive withal, even if not of highest in-

terest to members, and that it is due the communities whose guest the society must be from year to year to give them this brilliant, enchanting, public display.

I think it would be well in some respects if the meetings were held near, in time and place, the meetings of the American Association for the Advancement of Science, that many that cannot otherwise do so may attend both. The time and place of meeting next year are left for the executive committee to decide. I feel assured that unless this plan be adopted and the A. A. A. S., meet some distance from our city, the American Society of Microscopists would be glad to meet in St. Louis next year. Only the venerable Dr. A. Litton of Washington Univeirsity, Dr. F.A. James of the St. Louis Society of Microscopists, and your correspondent of the St. Louis Microscopical Society were here from St. Louis, and there hardly seemed sufficient authority to invite and press the invitation. I trust an invitation may yet be extended from St. Louis in time, and I believe the meeting would be of incalculable value to the West. Shall a move be made? D. V. D.

AMERICAN PUBLIC HEALTH ASSOCIATION

According to announcements already published, the Twelfth Annual meeting of the American Public Health Association was held in Liederkrantz Hall, St. Louis, Oct. 14, 15, 16, 17, the first session being called to order promptly, at 10 A. M., by President A. L. Gihon.

The number in attendance at this meeting was not so great as at some of the former meetings of the Association; but the work done was creditable; the number of papers presented was large, and the quality of them was excellent.

So far as the local arrangements were concerned the committee is to be commended for its efficiency and complimented upon its success. The location of the hall seemed to some to be unfortunate; and it was thought that a larger attendance of citizens might have been had at the evening meetings if they had been held in Pickwick Hall, as were those of the Convention of Charities and Reform. Still the location probably accommodated as many as the other would have done, and in all other respects the arrangements were admirable. One provis-

ion made by this committee was an excellent one. Each delegate was presented with a copy of a set of maps of the city. One of these maps represented the sewerage and water supply of the city, another gave the mortality of the different parts of the city, while the third indicated the mortality from cholera in different parts of the city in the last epidemic.

On Wednesday evening the streets were illuminated by the generous courtesy of the gas companies, this being a repetition of the brilliant display of "fair week." Carriages were provided to carry the visitors from the Southern Hotel which was the officers' headquarters, through the illuminated streets to the hall, the evening session being set a little later this evening for this purpose. Friday afternoon carriages were again prepared to take as many as would go for a visit to the Botanical Gardens where they were received at the residence of Mr. Shaw. In the evening a very pleasant entertainment was given the members by the "Elks' Club." The Mercantile, University, St. Louis, Germania, and Leiderkranz clubs invited the members of the Association to avail themselves of the privileges of the clubs.

It may be mentioned here that the Committee on Finance were quite successful in raising funds to meet the expenses connected with the meeting. After all bills were paid there was a surplus of two or three hundred dollars. With this money the committee decided to purchase full sets of the published transactions of the Association for the Mercantile Library and the Public School Library and the Library of the Surgeon General at Washington. Copies of the volume for this year were also to be secured for the largest contributors, while volumes containing only the St. Louis papers were ordered to be presented to the smaller contributors while the remainder was to be donated to "The Childrens' Hospital."

President Gihon made a most excellent presiding officer, his rulings being prompt, decided and judicious. His address on the Sanitary Responsibilities of the Citizen was able and interesting and held the attention of the audience throughout. We have not space here to enable us to give even a hasty abstract of the papers that were read. This, however, we regret the less because the daily papers gave quite extended abstracts of all the best of them.

It is to be hoped that an interest in matters of public health and hygiene was aroused by the holding of this meeting here which will bring forth fruit in a wiser and more liberal policy with reference to the provision for sanitary work in our city.

FOREIGN CORRESPONDENCE.

LONDON LETTER.¹

MEDICAL LEGISLATION.—THE APOTHECARIES' COMPANY.—LICENSES TO PRACTICE MEDICINE.—PHYSICIANS DISPENSING MEDICINES.—NEW REMEDIES.—DR. HENEAGE GIBBES.—SIR ERASMUS WILSON.—SIR W. C. HOFFMEISTER.—MYXEDEMA.—INTERNATIONAL MEDICAL CONGRESS.—
NUMBNESS OF UPPER EXTREMITIES.

LONDON, September, 1884.

Parliament has again adjourned without passing the Medical Bill. Other questions of party interest and importance occupied too much the time and attention of the government. Many matters of useful legislation were also abandoned because the House of Lords refused to pass a measure in the form sent up to it, which would have given an undue advantage to the party at present in power. This has given rise to a cry among the partizans of the government for a reform of the Upper House. As far as legislative capacity is concerned the Upper House is far superior, both from its constitution and facilities for transacting business. In two consecutive sessions the Medical Bill has passed the House of Lords to be thrown out or abandoned in the House of Commons. The present constitution of the Lower House is such that the real interests of the country materially suffer. Time is wasted in party cavils, and the chief measures advocated or passed are in the interests of one class of the community, that class which returns the majority of members, and matters of national concern are ignored. The greatest necessity of the time is some such reform in the representative House as would enable it to perform its part in directing the affairs of the nation.

1. This letter was received after the October COURIER had already gone to press. [Ed.]

One of the changes made in the Medical Bill while before Parliament on this last occasion was the removal of the Apothecaries' Company from any participation in the education and government of the profession. This appears to be hardly fair, as the Apothecaries' Company has in the past done more for the improvement of the profession than any other corporate body. An endeavor will be made in the recess to reinstate it in its proper place in the Bill. It was through the exertions of the Apothecaries' Company in 1815 that an act was passed which enabled it to recover penalties from those who carried on illegal practice; and it also was the first corporate body in England to establish an examination for medical men and to endeavor by the granting of its license to indicate to the public those who by education were fitted to practice the art of healing. Many years afterwards the Royal College of Physicians of London, which for generations had neglected its duty with regard to the general medical education in the country, followed the example of the Apothecaries' Company by instituting an examination for general practitioners and granting its license to practise, but it has made no endeavor to suppress illegal practice or the use of false medical title. The Apothecaries' Act of 1815 has been up to the present time the only measure which has in any way dealt with these notorious and frequently repeated abuses. Since 1815 the Apothecaries' Society has granted its license to 20,000 practitioners, nearly 10,000 of whom are at present living and who constitute almost one half of the general practitioners of the country. The Licentiates of the Society of Apothecaries and the Society itself have never been guilty of assuming or encouraging the assumption of the title "Dr.", which has been allowed by other corporations. In every way the Society has honorably performed the duties devolving upon it in the past, and in the future is calculated to supply a great public want in a way in which no other body can. The tendency of the universities and other corporations is to force medical education up to a much higher standard than is necessary for the requirements of the great mass of the people. With the extinction of the class of men holding the L. S. A. qualification will be the extinction of medical men qualified to deal with the daily ailments and accidents of the poorer classes, men who have gone through a sufficiently severe medical training and who are not above doing a cheap class of practice among the poor and, where necessary, keeping open surgeries. Should this class of practitioner

disappear altogether, the masses will be driven to seek relief from the prescribing chemists who have received no kind of medical education at all. At an influential meeting of Licentiates of the Society of Apothecaries recently held at Apothecaries' Hall, it was, *inter alia*, unanimously resolved:—

“That this meeting (a representative one of the general practitioners of England and Wales) learns with surprise and indignation that the Society of Apothecaries of London, which for the last 70 years has been mainly instrumental in raising the education and qualification of the general practitioners in medicine to their present high standard of excellence, should be the only one of the English Licensing Authorities excluded from returning representatives to the Medical Board for England, proposed to be established by the Medical Act Amendment Bill now before Parliament.”

There is something to be said in favor of medical men dispensing their own medicines, although the would-be reformers in this country consider it one of the chief causes of the low social position of the profession. It is impossible to level up the whole profession and make all its members rank on an equality. There are persons of all grades who require medical treatment and who have different social surroundings, and there must be medical men who will adapt themselves to these surroundings and treat every class. There is no reason why medical men who practise in densely populated neighborhoods in our large towns should not be thoroughly well educated and gentlemen, but they must not be above dispensing the remedies they prescribe, or accepting small fees in return for their services. It is absurd to expect that the poor will consult a qualified medical man, pay him a fee, and obtain the medicines ordered from a chemist. The result of the action of the profession in this respect is to drive the masses to seek relief from unqualified persons.

Another advantage to be derived by a medical man from keeping and dispensing his own drugs, is the facility with which he can use and watch the action of new remedies. So many new drugs are now being continually brought forward that a physician feels anxious for some opportunity for testing their virtues. If a suitable case presents itself for trying a newly recommended drug the greatest difficulty is often experienced in finding any chemist who keeps it. As I have said before, the number of these drugs is so great that it cannot be expected that a chemist would keep them

all, but were a medical man in the habit of dispensing his own medicines he would keep those in stock he wished to try. The only means now that a non-dispensing physician has of watching the action of new remedies is when he is connected with a hospital and can prevail upon the dispensing department to obtain for him any drug that he may want. Some time ago, from reasons I have alluded to, I was unable to try the action of *grindelia robusta* in spasmodic asthma; no doubt the drug can now be easily obtained. The report of Dr. Wm. Murrell on the action of *Chekan* and its liquid extract induced me to wish to try it, but I have been prevented by the same causes. A short time ago the drug could only be obtained from one chemist in London. Dr. Murrell has treated many cases of chronic bronchitis with *Chekan* in the Royal Hospital for Diseases of the chest and in the Westminster Hospital, with marked beneficial results. He says "they were all bad cases, most of them of many years duration. Many of them had been attending at the Hospital for some considerable time, and, almost without exception, they had in former years undergone much medical treatment with comparatively little benefit." These difficulties associated with the use of new drugs have made me very envious of the facilities possessed by practitioners who dispense their own medicines.

Dr. Heneage Gibbes, whose beautiful preparations of objects for examination under the microscope I noticed in my letter which appeared in the *COURIER* in April last, has been selected by the British Government to accompany Dr. Klein to India to carry out investigations as to the nature of cholera.

By the will of the late Sir Erasmus Wilson the Royal College of Surgeons of England is said to have come in for a legacy of £180,000 (\$900,000). Some years ago Sir Erasmus was president of the College, and only a week before he died he was given by the Council of the College its honorary gold medal. This medal was founded in 1801, but has only been presented on five former occasions. Sir Erasmus was selected for the honor on account of his extreme liberality. He had made numerous contributions to the museum of the College, and in 1869 he founded at his own expense the chair of Dermatology and was elected the first professor; he also endowed the pathological curatorship. In 1881 he founded a chair of pathology at the University of Aberdeen at the expense of £10,000. Sir Erasmus also created a chapel and new wing to

the Royal Sea-bathing Infirmary at Margate at a cost of over £30,000, and in 1872 he built the Master's house at the Royal Benevolent College at Epsom. In 1873 he restored the church of Swanscombe in Kent; and it was in the churchyard of Swanscombe that he was buried on the 13th of August last.

But his greatest fame was acquired by bringing from Alexandria the obelisk known as Cleopatra's needle. This obelisk was granted to the British Government in 1801 through the agency of Sir Ralph Abercromby, but was allowed to remain where it had fallen, on the sands of Alexandria. In 1840 it was offered to the British Government by Mehemet Ali, and again in 1877 by the late Khedive but the Government did not like to incur the expense of its removal. In 1878 Sir Erasmus Wilson obtained permission to bring it to this country at his own expense and devoted £10,000 to this object. A special ship was constructed for its transport, and, after many engineering difficulties, and after the ship bearing the needle had broken loose and been almost lost in the Bay of Biscay, it arrived safely in this country and was placed in its present position on the Thames embankment in September, 1878. The actual expense of bringing the needle to England exceeded by a large amount the sum Sir Erasmus Wilson had originally granted for the purpose. One of the last acts of munificence performed by this generous man was a gift of £2,500 to found a Wilson scholarship in the new Royal College of Music; he also contributed largely to the foundation of the College.

The Queen has lately been graciously pleased to confer the honor of Knighthood upon her Surgeon-Apothecary at Osborne, Dr. W. E. Hoffmeister. Dr. Hoffmeister graduated M. D. at the University of Glasgow in 1840, and is honorary consulting physician to the Isle of Wight Infirmary.

The subject of myxedema was again referred to at the International Medical Congress at Copenhagen. Sir William Gull asserted that the disease was cretinism in the adult and that the swelling and presence of mucin in the tissues was purely accidental. In recent numbers of the *Lancet* five cases have been reported by Dr. Kirk, of Glasgow, of sporadic cretinism in Scotland which tend to show the relationship existing between cretinism and the cretinoid affection or myxedema of adults. These cases, taken with the discussion on myxedema at Copenhagen, point to the interesting fact that in both conditions one of the most no-

ticeable features is the implication of the thyroid gland, simple endemic cretinism being chiefly associated with enlargement of that organ, or goitre; and sporadic cretinism in the adult or myxedema with atrophy or absence of that body.

The profession in England have heard with the greatest satisfaction that the next International Medical Congress is to be held at Washington. The occasion no doubt will be taken advantage of by many English medical men to visit the United States; a pleasure we often look forward to but are seldom able to enjoy. In the August number of the *COURIER* was an interesting note on a paper read before the College of Physicians of Philadelphia by Dr. Wharton Sinkler upon "Numbness of Upper Extremities." A very interesting paper upon the same subject will be found in the last volume (xix) of the St. Bartholomew's Hospital Reports by Dr. Ormerod. The paper is entitled "On a Peculiar Numbness and Paresis of the Hands," and details are given of twelve cases. Later on the author mentions the name of "Right palsy," given most likely to the same affection by Weir Mitchell in his book on "Nervous Diseases in Women" in the chapter on "Disorders of Sleep in Nervous or Hysterical Persons."

Dr. Ormerod describes the symptoms as follows: "They occur in women, usually about the climacteric age, and begin in the night. On waking, the patient has a feeling in the hands, or hands and arms (commonly of both sides), of numbness, deadness, pins and needles; sometimes there is actual pain, severe enough to wake her. There is also loss of power; the hands and arms become useless, and she cannot hold things. This may so far predominate that the patient comes to be treated for a supposed paralysis. Sometimes also the patients say that the hands swell, the veins swell, etc., at the time. The symptoms pass off in a little time, and rubbing suggests itself as a natural remedy. But occasionally they manifest themselves in the daytime also, and then principally when the patient sets about her ordinary work—washing, scrubbing, needlework, etc."

The swelling of the limbs is very slight if present at all, but there is a sensation of bursting or fullness. The affection occurs chiefly at night towards morning, and is more frequent after a hard day's work. In another part of his paper Dr. Ormerod adds: "The women are generally over forty, about the time of cessation of the menstrual function, though this is not always so. Some are,

no doubt, hysterical, but there is, on the whole, less extrinsic evidence of hysteria than one would expect." "I have not yet seen a typical case in a man."

Dr. Ormerod also agrees with Dr. Sinkler in recommending the treatment of this affection by friction and galvanism combined with the exhibition of bromide of potassium.

E. V. A.

COMMUNICATIONS.

FOREIGN BODY IN RECTUM.

Editor Courier of Medicine:—Dear Sir: While reading the proceedings of the St. Louis Medico-Chirurgical Society, I was reminded of a case that came under my observation some two years ago.

During one of my visits to a little boy the mother asked me to examine her baby. She said that whenever she lifted it, or it moved in any way, it would cry as if in pain. When quiet and during sleep there was no evidence of any pain. I examined the child, but could not ascertain any cause to account for its conduct. Three days later I was called, in haste, to see the child. When I arrived the mother informed me that when changing the cloth she saw something just inside the anal orifice. I made an examination and removed a bent pin. It was located across the orifice with the angle presenting. In the meantime I had seen the child but had not advised any treatment, because there was no derangement of function of either stomach or bowels.

The child gave no further evidence of pain, on being moved, after the pin was extracted. I am inclined to believe that the pain commenced only after the pin lodged in the rectum.

Yours truly H. M. McCLANAHAN A. M., M. D.

Woodhall, Ill., August 9, 1884.

REGISTER!—Dr. Carson, Clerk of Board of Health, desires to impress upon the minds of the profession the importance of having their certificates from the State Board of Health recorded in the office of the Board of Health. Many physicians throughout the city hold such certificates and have failed to have them recorded as required by state law."

NOTES AND ITEMS.

QUARANTINE.—Dr. J. H. Rauch in his address before the National Conference of State Boards of Health at St. Louis last month said: "Sooner or later the National Government will be compelled not only to assume supervision of exterior quarantines, but to provide for a permanent system of cooperation with State and local governments in the administration of inter-State sanitation; in order, on the one hand, to prevent the introduction of exotic epidemic diseases, and, on the other, to prevent their spread from State to State along the great intra-National highways of travel and commerce. This is a National duty. It is one that the National Government only can adequately discharge, and its expense is, equitably, one which should be defrayed from the National Treasury.

AMERICAN DERMATOLOGICAL ASSOCIATION.—The eighth annual meeting of the American Dermatological Association was held at Cranston's-on-the-Hudson, near West Point, Aug. 27, 28, 29, 1884. The following papers were read and discussed:

1. Xanthoma multiplex, by Dr. W. A. Hardaway, of St. Louis. (vid *COURIER* p. 289).
2. Clinical Contribution to the study of Lupus Erythematosus of the Hand, by Dr. J. N. Hyde, of Chicago.
3. Treatment of Acne Rosacea in the Male, by Dr. S. Sherwell, of Brooklyn;
4. Case of Unilateral Chromidrosis, by Dr. J. C. White, of Boston.
5. Case of late Cutaneous Syphilis Illustrating the occasional necessity of large doses of Potassium Iodide, by Dr. H.W. Stelwagen, of Philadelphia.
6. Dermatitis Herpetiformis, by Dr. L. A. Duhring, of Philadelphia;
7. Case of General Idiopathic Atrophy of the Skin, by Dr. W. A. Hardaway, of St. Louis;
8. Case of Vitiligo involving the whole surface, by Dr. H. W. Stelwagen, of Philadelphia,
9. Case of Arsenical Dermatitis, by Dr. J. C. White, of Boston.
10. On

Miliaria and Sudamina, by Dr. A. R. Robinson, of New York. 11. A Peculiar Sealing Affection of the Glans and Prepuce, by Dr. R. W. Taylor, of New York.

The following officers were elected.

President: Dr. W. A. Hardaway, of St. Louis; Vice Presidents, Dr. J. E. Graham, of Toronto, and Dr. A. Van Harlingen of Philadelphia; Secretary, Dr. W. T. Alexander, of New York; Treasurer, Dr. G. H. Rohé, of Baltimore. Greenwich, on Long Island Sound, was selected for the place of the next annual meeting.

CHICAGO AND THE CHOLERA.—One of the choicest bits of satire that we have seen is the editorial with this title in the August number of the *Chicago Medical Journal and Examiner*. Referring to the fact that two of the features for which that city is specially noted are "the water-works and the stock-yards," the editor calls attention to the relation which may be supposed to exist between these institutions and the danger of cholera in that city. The following exclamation is very striking. "The sacred singer of Israel once cried in a burst of poetic imagery, 'Moab is my wash-pot!' Chicago may well echo with the refrain, 'Lake Michigan is my wash-pot, my drinking cup, and my chamber-pot.'"

Then follows a graphic description of the actual condition of the stock-yards and the South Branch of the Chicago River, and the editor suggests that the hope of that city for exemption from danger of Asiatic cholera lies in the doctrine of inoculation by attenuated poison; that inasmuch as her people are constantly imbibing a mild dilution of pestilential poison, there is no reason to fear the worst that cholera can do.

EMULSIONS.—PROF. J. M. GOOD read a paper at the annual meeting of the Missouri State Pharmaceutical Association in which he advocates most strongly the extemporaneous preparation of emulsions of the fixed oils instead of any of the preparations made by the manufacturing chemists. Inasmuch as milk, which is the model emulsion, keeps but a few days, he thinks it unreasonable to expect that artificial emulsions can be made to be absolutely permanent, although they may be so made as to remain good for weeks. He notes also that many of the so-called emulsions of the trade are simply insoluble soaps made by saponifying cod-liver oil with lime-water.

THE STATE CENTRAL MEDICAL SOCIETY is the name of a district medical society comprising the members of the profession in Osage, Gasconade, Franklin and contiguous counties. This society was formerly known as the Tri-County Medical Society; but at the meeting held August 14 in Hermann, Mo. the change was made and a permanent organization was perfected, a constitution and by-laws were adopted. The following are the officers for the current year: President, Dr. Sylvanus C. Griswold, of New Haven; Vice-Presidents, Dr. D. M. Caughell, of Chamois, and R. M. Turner, of Morrison; Treasurer, Dr. Jockshau Freyman, of Hermann; Secretary, Dr. F. D. Caughell, of Chamois. The meetings are to be held quarterly.

ENGLISH DIPLOMAS.—Bellevue Medical College will hereafter issue diplomas in English instead of Latin as heretofore.

UNRELIABLE FLUID EXTRACTS.—Dr. N. L. NORTH believes that the secret of the inefficiency of many of the drugs that are now dispensed and of the lack of results obtained from the use of remedies which were once highly esteemed is to be found in the fact that many of the fluid extracts are prepared from dried plants instead of the fresh green specimens.—*N. Y. Med. Rec.*, July 26. '84.

MACOUPIN CO. ILL. SOCIETY FOR MEDICAL IMPROVEMENT.—At the last meeting of this Society held on the third Tuesday of June, Dr. A. C. CORR read a historical sketch of the society and of the medical profession in that county. The society as now organized has just completed its tenth year, and the record of the work done during that period is certainly creditable to its members. Such reviews of work done and advancement made are advantageous to a society as truly as is self-examination profitable to the individual. Dr. Corr has done a good thing for the Macoupin County Society in preparing such a careful record of the work done there.

PUBLIC PUMPS.—January 1, 1882, there were in the city of Brooklyn, N. Y., 296 public pumps. Of these 230 were ascertained to have water unfit for human consumption by reason of the entrance into the well of filth of various kinds from the surrounding soil, or from the street. 183 of these have consequently been abolished; but the remainder still are in use.

PROF. COHNHEIM, the celebrated pathologist, died Aug. 15, at the age of 45 years, from a chronic renal disease. His name will be immortalized in connection with his studies and experiments

regarding the processes which constitute inflammation. "Without blood-vessels no inflammation is possible" was his great proposition.

CHOLERA MIXTURES.—The following are the best known and most commonly used "cholera mixtures" as prepared and sold by druggists:

Squibb's Cholera Mixture

R	Chloroformi,	-	-	-	-	-	parts	3
	Tr. opii,	-	-	-	-	-	"	8
	Sp. camphoræ,	-	-	-	-	-	"	8
	Tr. capsici,	-	-	-	-	-	"	8
	Alcohol,	-	-	-	-	-	"	13

M. Sig. Dose, One fluid dram.

Asiatic Tincture for Cholera:

R	Pulv. opii,	-	-	-	-	-	℥j.
	Camphoræ,	-	-	-	-	-	℥j.
	Ol. caryophylli,	-	-	-	-	-	fl. ℥j.
	Pulv. capsici,	-	-	-	-	-	℥j.
	Spts. ether. comp.	-	-	-	-	-	Oj.

Macerate two weeks and filter. Dose 20 to 60 drops.

London Board of Health Cholera Mixture.

R	Pulv. aromat.,	-	-	-	-	-	℥iij.
	Aq. ammoniæ,	-	-	-	-	-	fl. ℥iij.
	Tr. catechu,	-	-	-	-	-	fl. ℥x.
	Tr. cardam. co.	-	-	-	-	-	fl. ℥vj.
	Tr. opii,	-	-	-	-	-	fl. ℥j.
	Misturæ cretæ q. s.	-	-	-	-	-	fl. ℥x.

M. Dose, One ounce,

Russian Cholera Drops.

R	Ol. menth. pip.,	-	-	-	-	-	m. lxxv.
	Tr. opii,	-	-	-	-	-	fl. ℥v.
	Vin. ipecac.,	-	-	-	-	-	fl. ℥ij.
	Tr. valerian. ether.,	-	-	-	-	-	fl. ℥iv.

M. Dose 10 to 20 minims.

"New York Sun" Cholera Mixture.

R	Spts. camphoræ,	}	-	-	-	-	equal parts.
	Spts. menth. pip,						
	Tr. rhei,						
	Tr. opii,						
	Tr. capsici,						

Mix. Dose, 15 to 30 drops.—*National Druggist*. July 25, 84.

ANIMAL EXCRETA IN WATER.—The products of the decomposition of animal matter in water are, however, by far the most objectionable impurity. Organic matters, produced by the decomposition of vegetable substances, are not especially dangerous. But the products of decomposing animal substances are highly dangerous, even when in minute quantities. These impurities do not make themselves apparent to the taste. On the contrary, such waters are frequently considered unusually fine in flavor, and persons go a great distance to procure them. Nevertheless they contain an active poison. Many diseases of the most fatal character are now traced to the use of water poisoned with the soakage from soils charged with sewage and excremental matters.— *C. F. Chandler* in Vol. I of Proceed. of Am. Public Health Assoc.

TRI-STATE MEDICAL ASSOCIATION.—We have received a programme of the meeting of this Association, to be held in Memphis, Tenn., November 12, 13. The states included in the organization are Mississippi, Tennessee and Arkansas. Most of the papers on the programme are promised by physicians from the first two states, only two being announced from Arkansas. Some of the subjects announced are of great interest and we doubt not will elicit interesting and profitable discussion. Arrangements have been made for a large attendance and it is to be hoped that the committee will not be disappointed.

OXON. A subscriber asks the meaning of this abbreviation occurring in titles. It indicates that the degree with which it is associated was conferred by the University of Oxford, Eng. In the same way Cantab. indicates that a degree with which it is associated was conferred by the University of Cambridge. Thus Dr. Samuel D. Gross was honored by the University of Oxford with the degree *Doctor Civilis Legis*, and we find among his titles the letters "D. C. L. Oxon." The University of Cambridge conferred the degree *Legum Doctor* and we find the title "LL. D., Cantab."

THE GROSS MEMORIAL.—We heartily endorse the suggestion of the *New York Medical Record* of August 30th that the committee on the Gross memorial modify their plan, and instead of founding a memorial professorship in Jefferson Medical College, establish a public lectureship on pathology or some allied subject. "Such lec-

tureships as in England annually commemorate the names of Harvey, Hunter, Lettsom, Gulston and others, would fittingly adorn the memory of America's greatest surgeon."

We doubt not that very many would gladly contribute to such a memorial who would not recognize the force of an appeal to found a professorship in *any one* medical college, even to commemorate the name of Dr. Gross.

OBITUARY.

SIR ERASMUS WILSON, LL. D., F. R. S., F. R. C. S.

This distinguished dermatologist died August 8, 1884. He was born in 1809. He commenced his medical study in 1825 as a pupil of Mr. Abernethy at St. Bartholomew's Hospital. In 1831 he was admitted to membership in the Royal College of Surgeons. He was appointed Demonstrator of Practical Anatomy under Mr. Richard Quain and was soon known as a skilful dissector and excellent teacher. He made numerous dissections and permanent anatomical preparations. In 1838, he published his "Dissector's Manual" and in 1840, he was appointed lecturer on Anatomy, and Physiology at Middlesex Hospital. Other anatomical works were published after this and he was quite distinguished as an anatomist, and "Wilson's Anatomy" was for many years the text book most in use in this country.

Having turned his attention to the special study of diseases of the skin, he soon earned for himself distinction in this field and his practice became large and highly remunerative.

Having accumulated a very handsome property he made use of it liberally and generously, and his name will be perpetuated not only as an eminent specialist, but as one who contributed the means to transport Cleopatra's Needle from Egypt to London; who founded the Erasmus Wilson Professorship of £10,000 in the University of Aberdeen, and who contributed largely to various philanthropic and benevolent enterprises. It is stated that the Royal College of Surgeons of England, as his residuary legatee, receives about £180,000.

ST. LOUIS COURIER OF MEDICINE.

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No. 6.

ORIGINAL ARTICLES.

THE MANAGEMENT OF NATURAL LABOR SO AS TO SECURE THE BEST RESULTS.

BY W. M. MCPHEETERS, M. D.

[Read before the St. Louis Obstetrical and Gynecological Society.]

THE subject of this short paper is certainly not a novel one—on the contrary, it is as old as medicine itself, but none the less important on that account. It is not always the newest things, or the rarest things that are of most interest to the practitioner of medicine; but rather the things of daily occurrence—the A B C's, as it were, of professional life. When we consider the very large percentage of female diseases and of gynecological cases, traceable directly or indirectly to the accidents of child birth or to mismanagement during labor—when we behold, as we too often do, the healthy, robust, blooming girl, soon after she becomes a mother, transformed into the pale-faced, anemic, suffering woman, the propriety of often recurring to this trite subject cannot be questioned. No matter how experienced the accoucheur, or how frequently he may be called to minister at the bedside of the parturient woman, knowing, as he above all others does, the possibilities of danger to both mother

and child, there is in every case some anxiety felt as to the result and a corresponding feeling of satisfaction when the case issues, as naturally it should, safely and well. Among educated physicians there is a substantial agreement as to the main points of procedure in such cases, whereas in what may be termed the minor details there is considerable diversity of practice, involving many points well worthy of discussion. Having no theories to advance, and claiming originality in nothing, my object is briefly to outline that method of managing natural labor which long experience has taught me is safest and best. And yet I am well aware of the fact, that general deductions in medicine cannot safely be drawn from the experience of any single individual, however ample that experience may be, and although it is natural that we should be influenced in our opinions and controlled in our practice by our own clinical observations, it will not do to dogmatize in the domain of science by asserting as absolute truth the supposed results of our own limited experience.

In every case the physician should visit his patient for several weeks before her expected confinement. These preliminary visits are important, that the state of her general health may be learned—the condition of the bowels and kidneys inquired into, and if renal disease be suspected, the urine subjected to analysis, to ascertain whether or not albumen or other morbid products are present, and to give such general directions and instructions as may be required in order to place the patient in the best possible physical condition. He should also inform himself as to the hygienic surroundings of the patient, and see that all avoidable sources of disease are removed, and that such therapeutic agents and appliances as may be required in an emergency, are on hand. Advice, too, as to the selection of a proper nurse is of special importance. The nurse should be a healthy, vigorous woman, of cleanly person and habits, cheerful, but not loquacious, with sufficient intelligence and experience to carry out with skill and dexterity the instructions given her, but not one too highly impressed with her own importance, or who is of the opinion that she knows more than the doctor himself.

When labor begins the patient should be cheered and encouraged, and as far as possible inspired with hope and courage. If the bowels have not been thoroughly evacuated, this should be accomplished by an enema, or, if time permit, by the administration of a mild but efficient cathartic. The bladder should also be emptied. When the pains have increased in force and frequency to such a degree as to leave no doubt as to their real character, a thorough digital examination should be made to ascertain the condition of the os and the position of the child.

It is hardly necessary to say that prior to such examination, as well as before and after each subsequent examination, the hands of the accoucheur should be thoroughly cleansed, and lubricated with lard, sweet-oil or vaseline. Soap and water and a nail-brush are all that are ordinarily required for this purpose, though antiseptic washes are sometimes necessary. The disinfectant that I have longest used is Labarraque's solution of chloride of soda, but latterly more frequently carbolic and boracic acids, or a solution of the corrosive chloride of mercury one part to 1,000 or 2,000 parts of water.

A satisfactory examination having been made and the presentation ascertained, the patient should be let alone, and not annoyed by too frequent or unnecessary examinations, but be allowed to sit up, lie down, or move about as she may elect, until it becomes necessary for her to take to her bed permanently. I prefer that the lying-in bed should be a single one, of suitable height and width to admit of convenient approach by both physician and nurse, and, of course, well protected with rubber cloth. From this she may be carefully removed after the completion of labor to her dry comfortable bed, but without any exertion whatever on her part.

When about to be delivered, my rule is to place the patient on her left side, with the left leg and thigh extended, the right thigh flexed, and a pillow placed under the right knee, or, what is still better, to have the nurse elevate and support the right knee with one hand, and with the other press the foot upwards. In this position the obstetrician can, I think, best control the situation, seated at the back of the patient with the left hand either making pressure on her back, or on the abdomen over

the fetal head as it approaches the pubic arch, and the right hand free to support the perineum when necessary or to perform such other manipulations as may be required. In case of considerable rigidity before resorting to general relaxants the cervix may be gradually dilated with the finger; and at a more advanced stage it may be desirable to carefully push up the anterior lip of the cervix above the symphysis pubis, when pressure upon it retards dilatation and intensifies pain. If there be prolapse of the cord, not a frequent occurrence, it should be replaced by the fingers, or by a suitable instrument and retained, if possible, above the head of the child. Efforts at reduction may be facilitated by placing the patient on her elbows and knees; but failing in this, resort must be had to turning and delivery by the feet, in order to save the life of the child.

During the first and second stages of labor the obstetrician has often to exercise great patience in awaiting the tardy operations of nature; but even though he should sometimes chafe under the delay, and the patient grow weary and become clamorous for relief, his duty still is to wait, where it is merely a question of time and not to resort to the hazardous expedient of attempting to coerce nature by the use of ergot or other oxytocic agents. As a rule the membranes should be allowed to rupture spontaneously, though there are exceptions to this, as to most other rules, as when they are unusually tough, and when, the bag of waters having served its purpose, it should no longer be allowed to weaken uterine contraction by unnecessary distension. Towards the close of the second stage of labor, when the head or presenting part is pressing firmly on the perineal floor, I am in the habit of applying towels dipped in hot water (as hot as can well be borne) to the perineum, renewing them when they become cold, and keeping this up assiduously until the delivery of the child is accomplished. In favor of these hot applications it may be stated that they promote cleanliness by protecting the accoucheur's hand from becoming soiled; they admit of efficient support being given to the perineum; they are exceedingly agreeable to the patient, and they promote relaxation of the soft parts. In the many hundreds of cases in which I have used them, during a long obstetrical practice, I have yet to

meet with the first patient who has not gratefully appreciated them. To this simple appliance I attribute, in no small degree, the very great immunity I have had from rupture of the perineum. It is not going too far also to say that they tend, indirectly at least, to prevent puerperal septicemia; as this dangerous complication is more apt to occur from wounds of the cervix, vagina, and especially of the perineum, rather than from intra-uterine lesions.

On several occasions, in cases of primiparæ of rather advanced age, when the head of the child was large, the perineum unusually rigid and unyielding, and the pains exceedingly violent and protracted, when, in fact, the parts were in a state of extreme tension, rendering rupture inevitable without speedy relief, after the hot applications had failed to relax, I have obtained the happiest results without any subsequent ill effects whatever by making a slight incision with a sharp knife on either side of the vulva, midway between the mons Veneris, and the fourchette, after which a single pain completed the birth of the head. By this insignificant operation, done during a pain and without the knowledge of the patient, I am satisfied that troublesome posterior lacerations were prevented. The inconsiderable wound inflicted, with the slight rent that followed have uniformly healed speedily and by first intention.

When the patient desires it and there are no contra-indications, chloroform in moderate quantities is administered towards the close of the second stage, and sometimes earlier if necessary, but never to complete anesthesia. I have seen no bad effects from it but the contrary. Besides the relaxation which it produces, it soothes and quiets, and renders bearable the anguish of this trying period. Although decidedly inclining to expectancy in midwifery practice, I by no means ignore the use of the forceps, but unhesitatingly resort to them whenever there is a well marked indication for their use, whether this be on account of inertia, the exhaustion of the patient or any other cause, rendering a speedy termination of labor necessary or desirable. I have not, however, found it necessary to employ the forceps in my practice, on an average, oftener than once in seventy-five or eighty cases. Hodges' long forceps is what I

have generally used. Should the child be still-born, efforts at resuscitation by artificial respiration and other restorative means should be persisted in for at least an hour. These prolonged efforts will sometimes be crowned with success, even after hope itself has well nigh given place to despair. Immediately after the expulsion of the child my rule is to place the left hand on the abdomen, and by gentle friction endeavor to promote the normal contractions of the uterus, and as it assumes the globular shape, to grasp it through the abdominal wall, though not violently, keeping it well under control until the completion of the third stage and until contraction has taken place and the bandage is applied. While the cord is being tied and cut, the hand of the nurse is temporarily substituted for my own. I regard tying the cord as important for the safety of the child. It is not always necessary to wait until the umbilical arteries have entirely ceased to pulsate before this is done; but as soon as respiration is well established, and other signs of vitality manifest themselves, the cord may be severed, taking care to leave it three or four inches long.

After the birth of the child, the placenta, having fulfilled its function, henceforth becomes so much foreign matter, and the sooner it is removed the better. This can usually be accomplished by combined expression and gentle traction on the umbilical cord, only sufficient to facilitate its passage through the cervical canal, when detached and from the vagina it can be removed by the fingers. The afterbirth should always be examined to see that both it and its membranous attachments are whole and entire. In cases of adhesion, after persistent expression somewhat after the manner recommended by Cr  d   has failed, it may become necessary to introduce the hand into the uterus and carefully separate with the fingers. Great care should be exercised in introducing the hand and in peeling off the adherent placenta, lest traumatic injury be inflicted on the vagina, the cervix, or on the interior of the womb.

The secundines having been thoroughly removed, a full dose of ergot should be administered to secure as far as possible complete and permanent contraction of the womb, and thus guard against post-partum hemorrhage. Of late years I have made it

a rule to make ocular examination, using a lighted candle when necessary, to ascertain whether or not the perineum has suffered injury, that prompt relief may be afforded if required. After the free application of sweet oil, lard or vaseline to the vulva, a well-fitting bandage should be applied. I attach importance to the bandage, and always use it. The ordinary straight binder does not answer the purpose. The pattern I prefer, one of which I keep on hand for the benefit of my patients, is gored on both sides, so as to fit smoothly and comfortably over the hips, and make uniform upward pressure on the abdomen; with a T appendage to retain the napkin or pledget of borated cotton, as may be preferred, in situ. This I advise to be worn for several weeks after the patient leaves her bed. After the mother has enjoyed a few hours' rest, and the child is washed and dressed, it should be put to the breast before anything else in the way of food is given. The breast and nipple require attention. For the painful fissures of the nipple, so common, especially in primiparæ, I have found a ten grain solution of nitrate of lead in an ounce of glycerine to act well. This should be applied by means of a camel's hair brush immediately after the child has been nursed, and thoroughly washed off before nursing again. It is hardly necessary to say that every mother ought to nurse her own child, and nothing short of absolute inability to do so, should be allowed to interfere with this obvious parental duty. Afterpains, often so annoying in cases of multiparæ, should be treated with ergot and quinine, but should these fail, as sometimes they will, anodynes have to be resorted to.

A copious lochial discharge, at first more or less sanguineous in character, is always desirable, and its absence should excite suspicion. From the first the labia within and without should be bathed with warm water several times a day. Ordinarily I have not found it necessary to begin with the vaginal douche sooner than the third or fourth day; but any departure from a strictly healthy character of the lochia demands attention, and any offensive odor whatever must be corrected by the use of proper disinfectants combined with warm water of the douche. The thermometer, too, at such a time should be frequently used, in

order that the first note of alarm, in the rise of temperature, may at once be recognized. For obvious reasons the intra-uterine douche should not be resorted to except in cases of necessity, which sometimes arise, as in the event of threatened pyemia or septicemia originating from causes within the womb. When these are used, it ought to be by the physician himself, or by a skilled nurse, and a retro-acting nozzle always employed, and even then care must be taken that none of the fluid remains in the womb, especially if it holds in solution an irritating antiseptic.

Regarding childbearing as a physiological act, eminently conservative rather than destructive both in design and tendency, I have yet to be convinced of the necessity, especially in private practice, of resorting to the tedious round of prophylactic observances, or the no less troublesome subsequent preventive measures, so strenuously urged of late by those whose minds are preoccupied with, and whose fears are aroused by, the supposed danger of inevitable sepsis, or the necessary presence of the pernicious micro-organisms in the air of the lying-in chamber, or of the deadly bacteria in the secretions of the patient. If such fears are well founded, the only wonder is that the human race has not long since died out from obstructions placed by nature herself at the very threshold of existence, by a species of subtle but almost unavoidable auto-infection. But while there is no foundation in fact nor in the experience of the great mass of the profession throughout the world for this antiseptic scare, it cannot be doubted that the discussion to which it has given rise has resulted in good, chiefly in emphasizing the importance of absolute cleanliness, thorough ventilation, and a proper domiciliary hygiene.

On the third day a gentle cathartic should be administered, provided the bowels have not been previously well moved. In cases of threatened fever, or when the liver or kidneys have been unduly pressed upon during pregnancy, or when there is reason to suspect fecal impaction high up in the intestine from the same cause, I have found an eight or ten grain dose of calomel combined with a few grains of bi-carbonate of soda to act most beneficially. I always insist on my patient remain-

ing in bed, and as far as practicable in the dorsal position, for two weeks, and in some instances longer, and that she shall not leave her room under a month. Too early rising after childbirth, before proper involution has taken place, and before the uterine ligaments and abdominal muscles—to say nothing of the vagina—have regained their wonted tone, is undoubtedly a fruitful source of uterine displacements and other female trouble. The teaching of Dr. Goodell of Philadelphia on this subject, if he has been correctly reported, in permitting his patients to get up on the third day, is, I believe, in the highest degree erroneous and hurtful; and it is hard to understand how so able and experienced a gynecologist as he is acknowledged to be should be the author of such advice. In this brief review, in which for brevity's sake much that is of interest and importance has been omitted, reference is had to ordinary vertex presentations, fortunately by far the most numerous, those cases, in fact, in which the accoucheur has little else to do than to see that nothing wrong or imprudent is done. In those cases in which the breech or the feet are the presenting part, the same general rules obtain, with such recognized modifications of practice as the changed conditions may require.

THE TREATMENT OF OPIUM ADDICTION.

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IN the June, 1883, number of this Journal, it was our privilege, and pleasure as well, to express views quite combative of those presented by a member of the St. Louis Obstetrical Society, at one of its meetings, on the treatment of opium addiction. And if, in so doing, an impression was made that the writer indulged in remarks savoring somewhat of egotism, let it be understood that he wrote from the standpoint of a professional attention directed for more than a decade, and part of that time exclusively, to the treatment of this disorder. Closing

that paper, the query was put: "Is there a better way?" and the answer, "There is," with the promise to state it, to which has been added more than one request, furnish cause for what, we trust, will prove our assertion, and convince those who have fallen victims to opium that well directed treatment has much to offer for their relief.

Opium addiction is a *disease*, a well marked functional neurosis, and deserving recognition as such to a greater degree than it has hitherto received. In the vast majority of cases the *vice* theory of its origin is incorrect, so that, with few exceptions, the term "opium habit" is a misnomer, implying, as it wrongly does, an opiate using quite under individual control.

As elsewhere stated, "The Genesis of Opium Addiction," *Detroit Lancet*, Jan., 1884, two causative factors exist—necessity and desire—but the result, if the opiate be sufficiently long continued, is essentially the same—a condition of disease, as evinced by various functional ills.

The central tracts involved are the cerebro-spinal and sympathetic systems. Deviations from health noted, are due to departure from the normal tone of one or both of these centres. Organic lesions are rare—possibly, some instances of renal or brain disease—the usual ultimate result being a state of marasmus, impaired nutrition and profound nerve depression, ending in death.

In the paper to which reference has been made, attention was invited to a new method of treatment, and as this is largely the same we now employ—some improved changes will be noted in passing—we reassert that it is based on the power of certain remedial resources to control abnormal reflex sensibility, and accomplishes largely two cardinal objects, minimum duration of treatment and maximum freedom from pain.

It is a fact well attested by clinical observation that the ravages of opium excesses are spent mainly on the nervous systems before noted, inducing changes that give rise to great nervous disturbance when the opiate is peremptorily withdrawn, unless some mitigating measures be interposed, and which, even in the process of very gradual withdrawal, is seldom, if ever, entirely avoided.

A recital of the various symptoms of abrupt opiate renouncing is not here needed. Let it suffice to say we regarded them all, certainly the most important—the aches, pains, yawnings, sneezings, shiverings, nausea, vomiting, diarrhea, restlessness, delirium, convulsions, exhaustion, collapse—as reflex indications of great irritation in those centres, and any method of having the power to counteract and control this condition must contribute vastly to the patient's comfort and cure.

Heretofore two plans have obtained in the treatment of opium addiction. One, which may well be called heroic, the entire and abrupt withdrawal of the usual opiate, invariably gives rise to great distress of mind and body, to relieve which various remedies are at the time resorted to. Those not fully informed, and desirous of knowing the extent of this suffering, which is far from imaginary as some would have us believe, should consult Levinstein's work, in which are given details of twenty-four cases of hypodermic morphia addiction treated by this method, which the author, by a process of logic neither safe nor sound declares to be the best. *This statement we emphatically dispute.* No treatment that entails such suffering as in the cases cited can claim pre-eminence over one more humane and equally effective. A study of the resultant effects in the instances alluded to reveals evidence of dire distress, in seven cases so extreme—perilous collapse—that a temporary return to hypodermic morphia became imperative to avert a fatal termination.

The other plan, consisting in a very gradual decrease of the usual opiate, meanwhile toning up the system to make amends for the accustomed narcotic, secures the desired result at much less discomfort, and we know of no reason why it should not be just as permanent. It is, however, open to the objection of requiring a much more protracted treatment—a point of importance when time is limited—while it also tends to exhaust the patient's patience, and may refuse to continue till success is secured.

The method we commend is a mean between these two extremes, and consists in producing a certain degree of nervous sedation and consequent control of reflex irritation by means of

the bromides, though we refer, specifically, to the *bromide of sodium*, having used that exclusively in cases under our care. This plan, which, so far as we are aware, is original with ourselves, is merely a new application of a well established principle, for the power of the bromides to subdue abnormal reflex irritability is so constant that it may be looked upon as an almost invariable sequel of such medication. Dr. Ed. H. Clarke, in his valuable treatise on the bromides, says, "diminished reflex sensibility, however different physiologists may explain the fact, is one of the most frequent phenomena of bromidal medication that has been clinically observed, and is, therapeutically, one of the most important." The testimony of other observers is to the same effect:—Gubler, Guttman, Labordo, Voison, Damourrette, Eulenberg, Claude Bernard, Brown-Sequard, and Echeverria, all giving evidence as to the power of these agents over abnormal reflex action, and at the same time over the general nervous system. Admitting that the symptoms of opiate disusing pertain almost exclusively to the domain over which the bromides exert so decided a control, we have a new field presented for the exercise of this valuable power, and the fact, proven conclusively by our experience, that it *does* exert this happy effect, fully supports the idea advanced as to the pathology of this disease.

In speaking of the bromide of sodium, let it be understood that we refer entirely to the influence of the *continued dose*, by which we mean its administration twice in the twenty-four hours, at regular intervals, so as to keep the blood constantly charged with the drug. A most important difference exists between the effects of this mode of exhibition and that of the single dose, or two or three doses so nearly together as to form practically one, for, in the former case, the system is constantly under the bromide influence, while in the other, the drug being largely eliminated in a few hours, the blood is nearly free from it a large portion of the time. Results obtainable from the continued use cannot be gotten from the single dose, and, as a consequence, its value is far greater in the disease under consideration.

Again the action of the continued dose being somewhat re-

mote—three to five days usually elapsing before there is decided evidence in this direction—much more desirable results are secured by its employment for several days *prior* to an entire opium abandonment, meanwhile gradually reducing the opiate, than if the withdrawal be abrupt and then reliance be placed on the bromide; for, in one instance, the maximum nervous disturbance from the opium removal, and its counteracting and controlling influence is far in excess of that to be had from its employment after the lighting up of the nervous irritation. What, then, we term *preliminary sedation* forms a peculiar and valuable feature in our giving of the bromide, and it is this special point we commend, our experience having convinced us that we have in it an unequaled means of obviating the discomfort incident to the treatment of this disorder.

The value of the various bromides depends on their proportion of bromine. Bromide of potassium contains 66 per cent., sodium 78, and lithium 92 per cent. We should, therefore, expect a more powerful influence from the latter agent, and, according to Weir Mitchell, it has a more rapid and intense effect. The sodium, however, answers every purpose and has several points in its favor over the other bromides; it is pleasanter to the taste, more acceptable to the stomach, causes little cutaneous irritation, and much less muscular prostration. In this connection, recent experiments and observations by Drs. Ringer and Murrell on the superior value of the sodium salt are of interest and may be found in the *British Medical Journal*, 1883.

Either of the bromides, in powder or concentrated solution, is somewhat irritant, sometimes producing emesis, and in any event, delaying its absorption. A practical point, then, is that it be given largely diluted. Dr. Clarke says, "there should be at least a dram of water to each grain of the salt." We give each dose of the sodium in six or eight ounces of cold water, and have never known it to cause vomiting.

To secure the requisite degree of sedation within a limited period, it is essential that the bromide be given in full doses. We are convinced that failure in its use in any neurosis is very often due to a non-observance of this point. Our initial dose of the sodium is 60 grains, twice daily, at twelve hours inter-

vals, increasing the amount 20 grains each day, *i. e.*, 70, 80, 90 grs. and continuing it 5 to 7 days, reaching a maximum dose of 100 to 120 grains twice in 24 hours. During this time of bromidal medication, the usual opiate is gradually reduced, so that from the eighth to the tenth day it is entirely abandoned. A decrease of one-quarter or one-third the usual daily quantity is made at the outset, experience having shown that habitués are most always using an amount in excess of their actual need, and this reduction occasions little or no discomfort. Subsequently the opiate withdrawal is more or less rapid according to the increasing sedation, the object being to meet and overcome the rising nervous disturbance by the growing effect of the sedative; in other words, maximum sedation at the time of maximum irritation.

Exceptions to this may occur. Some patients are so weak and anemic on coming that a previous tonic course is deemed judicious; the usual opiate is continued for a time, and, meanwhile, with good food, tonics and other measures an effort is made to improve the impaired condition, and with success, for we have seen patients gain markedly in strength and weight during this roborant regime.

Sometimes a patient before placing himself under our care has reduced his daily taking to the lowest amount consistent with his comfort. If so, the initial large reduction is not made, but the decrease is gradual throughout. Again, in some instances, no reduction is made for two or three days, at the end of which the bromide effect is secured in part, and the decrease is then begun. And in all instances, this rule governs; *each case is a law unto itself and the length and amount of the bromide giving and consequent rate of opiate decrease is determined entirely by individual peculiarity as shown both before and during treatment.*

Surprise may be expressed and objection made regarding the extent of the bromide doses, but the fact must never be overlooked that we are not to be governed in the giving of any remedy by mere drops or grains, but by the *effect produced*. Again, one effect of opium addiction is a peculiar non-susceptibility to the action of other nervines, necessitating their more

robust giving to secure a decided result. More, under the influence of certain abnormal conditions, doses which ordinarily are toxic become simply therapeutic. The annals of medicine abound with instances in support of this statement; and among the most striking may be noted the following: Dr. Southey read before the Clinical Society of London notes of a case of tetanus which occurred in a boy ten years old. The first symptoms of trismus were observed two days after a severe fright and drenching due to the upset of a water butt. They steadily increased up to the date of his admission to St. Bartholomew's Hospital on the eighth day of his illness, when the paroxysms of general opisthotonos seized him at intervals of nearly every three minutes. Each attack lasted from fifteen to thirty seconds, and although between the seizures the muscles of the trunk became less rigid, those of the neck and jaw were maintained in constant tonic cramp. The patient was treated at first with chloral ten grains and bromide of potassium twenty grains every two hours, and afterwards with the bromide alone in sixty grain doses every hour and a half. When about two ounces were taken in twenty-four hours, the attacks became less frequent, but at first each separate seizure was rather more severe, and on the evening of the eleventh day he was able to open his mouth better. On the thirteenth day the bromide was decreased to twenty grains every three hours, and on the fourteenth day was discontinued altogether. When the bromide had been omitted twenty-four hours, the attacks returned at intervals of an hour, and the permanent rigidity of the muscles of the neck was re-established. His condition now steadily became worse, so that on the eighteenth day of his illness it became necessary to resort to the previous large doses—one dram—every hour and a half. After three such doses, the expression became more natural, and he was able to open his mouth again; but it was not until the twenty-fifth day of the disease that it was possible to discontinue the remedy. The patient remained in a state of remarkable prostration and drowsiness, sleeping the twenty-four hours round, and only waking up to take his food for eight days, and passed all his evacuations under him. He subsequently steadily and rapidly convalesced. The bromide produced no

aene or other disagreeable effect, and certainly seemed to exert a markedly controlling influence upon the tetanus.

Surely, under ordinary circumstances, no one would think of giving such doses of bromide, but here, under the antagonizing influence of the intense reflex irritation, their effect was vastly beneficial, conducing beyond question to the patients' cure.

Given as we commend, no effect is usually noted before the second or third day. Then patients mark an increasing drowsiness which deepens into slumber, more or less profound—so much so at times that it is difficult to remain long awake. With this is a growing aversion to active exercise, not solely due to lessened muscle force but largely to mental hebetude. Some cases are met with in which the hypnotic effect is not very decided, but the rule is as stated. Sometimes a saline taste and increased saliva with the bromic breath are noted, and the tongue becomes furred. Aene is usually absent. The renal secretion is almost invariably largely augmented. We have known patients to pass more than 100 ounces in the twenty-four hours, and we have noticed this, that where the renal activity is not increased or is diminished, the sedative effect of the drug is more prompt and decided. The practical point of this is obvious, such cases require a less prolonged bromide giving.

With some there is slight transient loss of co-ordinating power in the fingers, and, exceptionally, in unusually sensitive subjects, there may occur mild startings of the fore-arm tendons. These, however, soon subside, and their going is largely hastened by local faradic seances.

Another bromide symptom, and a curious one it is, refers to a peculiar form of aphasia, as shown by using one word for another: Brown for Jones, cake for comb, etc. This may persist for several days. Dr. Clark refers to such instances, and says, "they are hints of a distinct organ of language, and suggest the notion that, inasmuch as the drug we are considering paralyzes reflex before it does general sensibility, language may be the expression or correlation of a peculiar reflex power."

Another similar symptom is an odd effect on the memory; the loss of a word or sentence, and entire inability to regain

them at the time, so that the train of thought is abruptly ended. These, though often amusing, are sometimes quite annoying to the patient, but possess no other importance and soon pass away.

Before dismissing this phase of the treatment we must again insist upon the fact that all cases of opium addiction do not require the bromide alike. This is a point of prime importance; and failure to put it in practice is, doubtless, often the main secret of ill-success or unpleasant results in its use. The patient, as well as his disease, must be treated, and he who uses the bromide, as Fothergill asserts Opie mixed his colors, "with brains", will accomplish far more than the tyro who sets himself up in the treatment of this or any other disorder, and fails to be guided by good judgment. To follow a mere routine giving of the bromide or any other remedy, unvaried by individual condition, is a sorry showing of professional incapacity. We have lately learned of a case of this kind presenting a lamentable lack of discretion. The patient, a medical man, addicted to morphia, having decided upon self-treatment, began a plan of operations with the bromide, taking it himself for several days, and then, its hypnotic effect asserting itself, he gave orders that it should be given him some days longer, and this senseless advice being blindly followed by his attendant, he sank into a stupor which persisted for more than a fortnight. A more indiscreet and foolish performance is seldom heard of, and illustrates anew, in another sense, the truth of that trite legal proverb as to the mental status of the individual who is both lawyer and client. Let it be distinctly understood that some cases of opium addiction are ineligible for the bromide treatment. Those complicated with serious lesions of the heart or lungs should be excluded, and those in which there is marked general debility should always be accorded a previous tonic course. Lastly, as before asserted, *in each and every case where it is given, the extent of its continuance is to be governed entirely by individual peculiarities as indicated both before and during treatment.*

We now desire to call attention to another point which our experience has convinced us is of value. We refer to the treatment just after the habitual hypodermic or other opiate is

abandoned. Supposing a case where at the end of five to seven days, as individual peculiarity may determine, the desired sedation is secured and the usual opiate reduced to a minimum—say $\frac{1}{6}$ to $\frac{1}{2}$ grain each dose, instead of an entire discontinuance, we change the order of affairs and make a break in upon the routine taking, the “habit,” so to speak, by giving one full dose, *per os*, in the evening. This ensures a sound all-night’s sleep, from which the patient awakens greatly refreshed and often quite surprised at his good condition which usually persists during the day. The next evening at about the same hour, the maximum bromide dose and two-thirds of the previous opiate are given, the third evening the same amount of bromide and one-third the first evening’s opiate. This ends both opiate and bromide. Exceptionally the full single dose of opium and sodium is given only one or two evenings. During the following day, if the patient be quiet, nothing is given. Should there be minor discomfort, one-half ounce doses of fl. ext. coca every second hour have a good effect. Cases occasionally require nothing else. If, however, as usually occurs, despite the coca, the characteristic restlessness sets in, we give full doses of fl. ext. cannabis Indica, and repeat it every hour, second hour or less often, as may be required. When the disquiet is not marked, this will control. If more decided measures be called for, we use hot baths, temperature 105° to 112° , of 10 to 20 minutes’ duration, and repeated as required. A short shower or douche of cold water often adds to their value. Nothing equals them for this purpose. Warm baths are worthless. The water must be *hot*, so much as one can bear. We have repeatedly known a patient to fall asleep while in the bath.

And, just here as to “full doses” of the hemp. The dose of the books is useless. As before stated, addiction to opium begets a peculiar tolerance of other nervines, and they must be more robustly given. We give 60 minims Squibb’s fluid extract, repeated as mentioned, and have never noticed unpleasant results. Small doses are stimulant and exciting, large ones sedative and quieting; hence the latter are seldom followed by the peculiar hashish intoxication. And, lest some timid reader should

regard this as reckless dosing, we hope to calm his fears by saying that the toxic power of hemp is feeble, and that these doses are the result of an experience of the drug in many cases in which smaller ones have failed of the desired effect.

At this writing two lady convalescents still insomniac are nightly taking these full doses with good effect in securing sleep. One recent lady patient, who did not lose a single night's slumber during treatment and whose need for a soporific ended in eight days, took no other hypnotic whatever. We have used it of late more largely than ever, and with growing confidence in its sleep giving power, taking in this regard almost exclusively the place of chloral.

Regarding this insomnia, Levinstein and other German writers assert that it will "resist every treatment during the first three or four days." This may be true with them, considering their method, and is of itself added proof that they are lamentably lacking in the therapeutics of this disease. Under the plan we pursue no such sleepless state is noted, and in ordinary, uncomplicated cases, patients can usually be promised recovery without the loss of a single entire night's slumber.

Chloral during the first four or five nights of opium abstinence fails as a soporific, often causing peculiar excitement or intoxication, patients talking, getting out of bed and wandering about the room, followed, it may be, after several hours by partial sleep. Later in full doses, (we prefer 45 grains at once rather than three 15 grain doses) alone or with a bromide it can be relied on as a hypnotic; but we have thought that in some cases where it secured sleep patients the next morning felt a certain languor, of which it was largely the cause. Some who use the hemp mention a feeling of fullness about the head and eyes with occasional confusion of thought, but seldom complain of pain, having noted only one such case.

The bromides, baths, hemp, and coca, with or without capsicum, of which more later, are therefore the main remedies for the restlessness and insomnia, two symptoms which, with a third, sneezing, are invariable sequelæ of opium withdrawal, and wanting which the patient is surely deceiving his physician.

For relief of neuralgic pains in various parts, which sometimes occur, varied measures suffice. At the head of the list are electricity and the local application of ether. As to the value of the galvanic current in neuralgic headache, so common in opium habitués, and the manner of using it, the reader is referred to a paper on "The Prevention of Opium Addiction," in the *Louisville Medical News*, Feb. 23, 1884. The same agent is effective in relieving limb and lumbar pains, though here a much stronger current is required than can be used with safety about the head. Sometimes a strong faradic acts well, and where one fails, trial should always be made of the other. Local hot baths, sitz baths or pediluvia, are often of great service for this purpose. Chloroform locally relieves; so, too, massage.

Regarding the other, those who have never employed it will, we are sure, be surprised at its pain-easing power. It matters not how it be applied; by spray, drop or lavement, it is potent for good.

These three, electricity, ether, hot water, are our main anodynes, and one special point in their favor is their entire freedom from unpleasant gastric or other results.

For relief of minor neuralgic pains other remedies, at times, suffice. Croton chloral, in 5 gr. doses every hour, is sometimes quite effective in tri-facial disorder. Tonga, in one dram doses of fluid extract every hour, is often a reliable anodyne. Its value in some cases seems increased by combining it with the various salicylates. Caffein or guarana occasionally relieves.

Externally menthol in solution, two drams to the ounce of alcohol, used with a brush, as a spray or the menthol cone, is sometimes of service; so too the well known camphor and chloral combination, bi-sulphide of carbon and various minor local anesthetics.

Under this plan of treatment, disorder of the stomach or bowels is rare. Our rule is to give an active mercurial or other cathartic, in the outset, if there be evidence of alvine disorder, and then secure regular action by such laxative as is found most agreeable. If the latter be so relaxed as to require restraint,

30 minim doses of fluid extract coto, or 60 grain doses of sub. nit. bismuth, every two to four hours often serve a good purpose. They are best given in capsule. If, however, the diarrhea persists more than 24 hours, the most effective measure is to give a full opiate, tinct. opii by mouth or rectum preferred, at bedtime. This promptly controls, gives a full night's sleep, and the trouble seldom returns. Fear of an untoward effect on convalescence is unfounded. With our experience, the assertion of one writer that, "it is impossible to cure the 'opium habit,' and bridge the patient over the crisis, without having the bowels freely relaxed," seems quite absurd. We have again and again seen patients recover who had only two, three or four movements daily. One such, lately dismissed, was a hypodermic taker of 20 grains of morphia daily and had been addicted for several years. Others have required a laxative enema in less than a week after the opiate withdrawal.

Formerly, an exclusive milk and lime water diet during the first two or three days of opium abstinence was deemed advisable. This regime is not now imposed, as some patients are able [unable.—Ed.] to do dietetic duty, and the rule is to make no restrictions unless the exceptionally occurring stomach or bowel trouble seems to require. More than one patient, habitués for years, did not vomit once.

The excessive vomiting mentioned by Levinstein and Obersteiner (they practice abrupt disuse), we have never noted. The former thinks the collapse, which we have never seen, observed in several of his cases, was due to the vomiting and purging. Probably the largest factor in causing it was the exhausting general mental and physical suffering which his monstrous method entails.

If the stomach rebels, entire rest, abstinence from solid food, or all food for a time, milk and lime water or Murdock's food in small amount, often does well. If more active measures be required, sinapisms, ether, Faradism externally, and internally bismuth, chloroform, menth. pip., ice are of value. If all fail, a full opiate, hypodermic, will promptly suffice.

Having thus crossed the opiate Rubicon, treatment relates

largely to the debility and insomnia. For the former, of internal tonics, stimulants, coca leads the list. But our experience does not warrant Morse's assertion, "coca cures the opium habit." That is a mistake. While it is of great value in relieving the varied symptoms of lessened nerve tone, it is not a specific. Patients, long used to opium, cannot abandon it and trust to coca alone to carry them over the crisis. This, save in mild cases, it will not do, but, conjoined with other measures, it is strong for good. Of a reliable fluid extract, we give sometimes before and always after the acute restlessness in four to eight dram doses every two hours or less often, as required, and continue in these full doses at increasing intervals for several days. As need for it lessens, we decrease the dose to one or two drams, and this amount *ter die*, combined with other tonics, may sometimes be continued with advantage for weeks. As a rule, however, its use is quite abandoned within a fortnight. Its effect, while noted in from three to twenty minutes, seldom persists more than two or three hours, so that, when the demand for it is active, it is best given at this interval. To remove the mental and physical depression, the minor neuralgiæ, and the occasionally occurring desire for stimulants observed in these cases, nothing equals it, being, in this regard, more nearly a specific than any drug at command, and capsicum in doses of one-half to one dram of the tincture with the coca often adds to its value. For details of this drug and its uses, see "A Case of Coca Addiction", reprint of which can be had of the writer.

Another agent of much service is general faradization, twenty minutes seances daily, the feet on a plate to which the negative pole is attached, while the other electrode encased in a large sponge well wet with warm water is applied to the entire surface with a current strong enough to be thoroughly felt but not painful. This imparts a grateful sense of exhilarating comfort, and is the most effective tonic at command. Thus applied or with anode to cervical spine it may be used daily so long as indicated, taking care not to overdo, for a current too strong or prolonged works mischief, overstimulating and exhausting to the extent, it may be, of several days discomfort, which nothing

but time will remove. Very exceptionally, faradism disagrees and has to be abandoned.

Alternating with or following we may use the galvanic current. This is a general tonic of special value in these cases. Our method is, positive pole to nape of neck, and negative to epigastrium for five minutes; then the former behind the angle of each jaw for one or two minutes, making the entire seance of 7 to 9 minutes.

Next to the electric tonic ranks the cold shower bath. It certainly is a great invigorator, and many a patient who dreads it at first soon comes to appreciate it most highly. If agreeing, it should always be taken. With some it acts as a hypnotic. We recall one instance in particular of a medical gentleman, who, still somewhat insomniac, after sleeping two or three hours and awaking with no prospect of further sleep, would take a shower, followed by a vigorous rubbing, and soon fall into a refreshing slumber lasting until morning.

Internal tonics, of course, have a place in the roborant regime, varied as the case may demand. In some cases we employ them from the outset, and the use of tinct. ferr. mur. in large doses, 15 to 20 minims, thrice daily, has seemed, in virtue of its tonic-astringent effect, to serve a doubly good purpose in lessening the tendency to alvine relaxation. After the opiate disuse, an excellent combination is fl. ext. coca with syr. hypophosphites of iron, strychnine and quinine, two drams of each, after meals: another, Fowler's solution or tinct. nux vomica with dilute phosphoric acid or acid phosphate. If anemic, ferric tincture or Blanchard's pills. Digitalis is often useful. In many cases, cod oil is of value, and may be continued for months. We make choice as required, of emulsion with pepsin and quinine, emulsion with phosphates or plain oil.

Some degree of anorexia is always present, yet it may not prevent the regular meal, and need never occasion anxiety, for probably it will soon give place to a well-marked reverse condition, which may be encouraged to fullest feeding short of digestive disaster. The appetite often becomes enormous, and sometimes restraint and digestive aid are demanded. If it be slow in returning, rousing measures, will suggest themselves. In such

cases it has seemed a good plan to stir up the alvine system, once or twice a week for a time with a mild cathartic at bedtime, or a full morning dose of hunyadi.

One result of the opiate quitting and the regime noted is often a greatly improved nutrition as shown by a notable increase in weight. One physician, not long since dismissed, gained a pound a day, and another convalescent has lately been adding to his avoirdupois at the rate of twelve pounds a fortnight.

Regarding the insomnia, Levinstein says, "sleeplessness, which is generally protracted up into the fourth week, is very distressing." For reason before given, his assertion is not surprising. Our record differs. Wakefulness is an invariable sequel and requires soporifics for a time, but is not so prolonged and does not resist treatment. We have known a patient able to dispense with hypnotics in five days; others in eight, and nearly all within a fortnight. Sometimes, they are longer required. Two patients, both physicians, during the last year did not regain natural sleep for three or four weeks, but this is quite exceptional.

This insomnia is of two kinds. Most patients, after the acute stage has been passed, soon secure sleep on retiring, but waken early—two or three o'clock—and fail to get more. Others remain awake nearly all night before slumber comes, and these are the ones who usually require soporifics the longer.

For relief of this, cannabis Indica or chloral with bromide, in full doses, serve our purpose. If, as rarely happens, the wakeful state is so pronounced or prolonged, despite treatment, as to distress the patient, we never hesitate to give a full opiate—*sub rosa*—and always with good result. In all cases, drugs should be dropped soon as possible and sleep secured by a fatiguing walk or other exercise, an electric seance, a Turkish or half hour's warm bath with cold douche or shower, a light meal or glass or two of hot milk; one or more of these before retiring.

Patients whose slumbers end early often note a peculiar depression on waking, and when such is the case, a lunch, milk, coffee, coca, or Murdock's liquid food should be at their command.

It may be well, in passing, to refer to certain minor sequelæ and their treatment. Occasionally a patient complains of dyspnea or palpitation. We have never noted them but twice, both ladies. A stimulant—coca with capsicum, or Hoffman's anodyne with aromat. spts. ammoniæ. will promptly control.

Some patients are at times annoyed by aching pains in the gastrocnemii, that may recur during several days. F. ext. gelsemium, in full doses, strong galvanic or faradic currents, massage, local hot baths, and topical use of chloroform or ether will relieve.

Others mention a peculiar burning in the soles of the feet which mustardized pediluvia and full doses of quinine usually control.

Sometimes, a dry, hacking, paroxysmal cough, more marked at night, may discomfort a patient for a time. It can be relieved by nitrate of silver sprayed, 10 to 20 grs. to the ounce, a bromide of sodium gargle, 60 grs. to the ounce, or a small blister to the sternum.

Returning sexual activity, as shown by nocturnal emissions and erections, as a rule, requires no attention. We once noted, however, a case where the awakened virile vigor was so marked that repressive measures were demanded.

The periodical function of females, which, usually, is irregular or suspended, has, so far as we have observed, required no special after-treatment.

Along with what has been suggested, should be such other general hygienic measures as will add to the good secured. Patients must be given attractive surroundings, cheerful society, diverting occupation and amusement, and freedom from care or worry of body and mind; in fact, anything, everything that will aid in the effort to secure a return to pristine health and vigor. That the management of these cases subsequent to the need of active professional care is of great importance, enlarged experience increasingly convinces. Neurotic or other disorders noted prior to addiction, whether genetic or not, must be relieved or removed. So too with those that may first appear after the opiate disusing; and when none of these are met, when there is merely a lessened power of brain and

brawn, ample time—months or years, if need be—must be taken in which to get thoroughly well, if the chance of a relapse would be brought to a minimum.

It is not to be supposed that a system shattered by opiate excess will regain its normal status within a week or a month, nor that a premature return to mental or physical labor will not imperil the prospect of permanent cure. The importance of this must be insisted upon. To medical men, who compose so largely the better class of habitue's, it is especially commended. Professional work must not be resumed too soon. The frequency of a narcotic return is in reverse relation to the length of the opiate abstention, and, as favoring this abstinence, prolonged rest, change of scene, foreign travel, sea voyages, all have much promise of good.

The absence of reference to certain remedies which have been mentioned by some as specially useful in the treatment of this neurosis may be briefly noted. Belladonna has been supposed to have a special value. We once used it to the extent of dry mouth and disturbed vision during the opiate withdrawal, but have quite abandoned it for the simple reason that we found on trial patients did fully as well without it, and the freedom from its peculiar effect certainly added to their comfort. Whatever its antagonistic influence in acute opium taking we do not believe it possesses any such virtue in chronic form.

Quinine in large doses from the outset, or grains two to four, increasing with the opiate reduction, has been thought to have special value. We have failed to note it, though as a tonic it is well adapted to all cases, and, in some patients, 20 gr. doses as an anodyne or soporific act well.

Strychnine is another valued tonic, especially in a very gradual opiate decrease, or at weekly or fortnightly reductions. It has no other claim.

Hydrocyanic acid dilute, aconite and veratrum viride have been suggested. Why we fail to understand.

Jamaica dogwood has been commended as an opiate substitute, and Morse lauds it extravagantly. He, however, is an enthusiast and as such goes quite too far.

Regarding its use he says: "Coca cures the opium habit. Ja-

maica dogwood does more than this; it is prophylactic of this disorder. By its use the baneful habit is forbidden the system." This, we think, is nonsense, and have no hesitation in declaring our belief that it is a most mistaken opinion.

And again, "As an hypnotic opium is not of greater worth," and, "As an anodyne opium is its only peer." Our experience is entirely contrary to any such assertions. We have made frequent trial of it. The results were uneven. In a few cases, the minority, as an anodyne it seemed efficient; as a hypnotic it always failed. Morse puts the dose at "fl. ext., dose min., v-xv." Our ill result certainly was not due to the limited quantity, for we usually gave it in two-dram doses. More recent trials have proven utter failures. One, as an anodyne in neuralgia four one dram doses, half hour interval, no relief whatever. Another as a soporific, six one-dram doses, same interval, no sleep. It is a nauseous drug, and the aversion to continuing it may sometimes account for its failure. Our patients too, may be peculiar, but be that as it may we have little faith in its value and have seldom used it.

Avena sativa has been largely lauded. We have given it again and again, in doses small and large, in water hot and cold, at intervals short and long, and always found it worthless, absolutely good for nothing; bottle after bottle has been left with us by those who made trial of it in vain, and their experience accords with many who have written us, some of whom have taken the "drug" in ounce doses several times daily, and used pounds of it in the trial without good! Let no one be beguiled into the belief that oats fill "the long felt want." Correspondence has furnished material for a paper which will we think quite disprove its vaunted virtue.

Hyoscyamia is a powerful drug, and in some cases may be of service. We once used it, but the need for it now seldom arises. Its employment should be limited to patients in good general condition, in whom the opiate disusing is attended with unusual insomnia and motor activity. In such instances its good effect is sometimes surprising, bringing quiet and sleep with a promptness and power almost startling. We used Merck's amorphous; dose $\frac{1}{12}$ to $\frac{1}{8}$ of a grain hypodermically. This,

in these patients may be deemed the usual dose. With some, however, this causes a mild delirium without sleep, and in such cases, the dose must be increased. Regarding its safety, Dr. John C. Shaw, Supt., of the King's County Insane Asylum, has assured us that it is largely given in that institution with as little fear of ill-effects as would attend the use of morphia.

The new alkaloid of Indian hemp, tannate of cannabin, commended by German authority, proved an entire failure in our hands. In ordinary insomnia, however, it may act well.

The latest claimant for professional favor, as a soporific, is paraldehyde. Dujardin Beaumetz lauds it and claims special value in these cases. Our experience does not warrant such statement. In full doses, 4 to 8 grammes, (60 to 120 minims), it sometimes brings sleep. Unlike chloral, in the early nights of the opium abstinence, it does not excite. In most cases both are inferior to Indian hemp. It is best given in one half to one ounce of syrup, flavored with peppermint, ginger or vanilla, and then added to a wine-glassful or two of ice water.

Non-mention of alcoholic stimulants has perhaps, been noted. We scarcely use them. The reason is varied. They are seldom called for. Very exceptionally, champagne, milk punch, or ale may be indicated, but our rule is, never to use any form unless imperatively demanded; and the advice of Levinstein, that "those who have an intense liking for alcoholic beverages may be allowed to drink wine in limited quantities," is we think, positively pernicious. As Bartholow says, "when the nervous system is losing the loved morphia impression it will take kindly to alcohol," and he adds, "I especially warn the practitioner against a procedure which the patient will be inclined to adopt, that is, to take sufficient alcohol to cause a distinct impression on the nervous system in place of the morphia. This must result disastrously, for when the alcohol influence expires there will occur such a condition of depression that more alcohol will be necessary."

With these opinions we are quite in accord. The fact must not be forgotten that some habitués have used alcohol with morphia; others have taken morphia after addiction to the former, and, in general, habituation to any stimulant or narcotic

begets a liability to take to another in case the original one is abandoned. As a factor in relapse, alcohol-taking ranks next to a re-use of opium. The risk then is obvious, and let the physician beware lest, in the effort to aid his patient in escaping one peril, he but involves him in another yet greater.

Some details of treatment apart from the strictly remedial, may be of interest. Our rule in making the opiate decrease is not to inform the patient as to its progress, nor the actual time when it is ended. Better tell him when days have elapsed since the last dose, and then the assurance that so long a time has gone by since his enemy was rooted will of itself be an aid in finishing the good work. The incredulous surprise with which this knowledge is received by some patients who have made frequent but futile efforts to escape is quite notable.

As regards the manner of taking, a radical change is made. If hypodermically, the syringe is at once discarded, and a sufficient amount of morphia or opium, given *per os*. In many cases resort to the morphia or opium can be made at once. If so, it should be done. If not, their use giving rise to nausea, vomiting or headache, as exceptionally they may, the usual method can be resumed for two or three days, and then the bromide influence having been secured in part, the syringe may be put aside, and the opiate used without unpleasant effect.

A German writer sometime ago asserted that many patients taking more than four grains, .25 to .30 grammes, hypodermically daily will get along fairly well with the same amount of morphia by the mouth. We have not found this to be the case. On the other hand, three times the subcutaneous supply, as advised by Bartholow is more than enough. An increase of one-half or double the amount will usually suffice.

Patients may demur to the change, but it should be insisted on, for experience has proven many points in its favor. In the first place, we believe there is, with some, a certain fascination about the syringe, which once ended, makes an advance towards success in treatment. Many patients come to think that the injections are absolutely essential, and to convince them to the contrary, as the change in taking will, inspires a feeling of gladsome relief and larger confidence in a happy result.

Again, the *staying* power, so to speak, of morphia or opium, *per os*, is much greater than by subcutaneous taking. Of this there is no question. Morphia hypodermically is more quickly followed by the peculiar effect of the drug, which too is more decided, but earlier subsides, a higher acme, sooner reached, to decline more rapidly; whereas, by the mouth, or in the form of opium, the rousing effect is more slowly developed, but it is on an evener plane, and more persistent. Patients, accustomed to four to eight injections, daily, will do well on two or three doses *per os*. One medical gentleman, now under treatment, who had been taking six injections daily, is doing perfectly well on one dose of opium by the mouth, night and morning.

As a rule, too, the change in taking brings about a marked improvement in the patient's condition. We have known them, after using the new method a few days, to declare that they felt better than for years. In many ways, notably, increased appetite and improved alvine action, is the change for good.

Still more, those who quit the syringe, and take morphia or opium usually cross the Rubicon of their opiate disusing with withdrawal symptoms so largely lessened as to make this result alone ample reason for the course we commend.

During the decrease, patients are permitted, if desired, to continue their frequency of taking. As a rule, however, by reason of the greater sustaining power of morphia or opium by the mouth, it is not required.

The only restriction imposed is that a certain amount shall suffice for twenty-four hours supply, and this is daily decreased, according to individual need, at such rate as will least likely conflict with their comfort. Patients moreover, are always instructed that if the amount allowed does not suffice, they are to apply for and will be given more. Such being the case, no proper motive exists for secret taking, and if despite this liberal proviso, it is indulged in, professional relations are suspended.

This being our plan, it will be inferred, and rightly, that we do not subject patients to such surveillance as compels their ta-

king a bath, during which search is made for contraband morphia. Nor do we have an attendant "dogging" their steps during the decreasing regime. No patient with proper self-respect would submit to such treatment without resenting it; and it is not likely to strengthen the confidence that should always exist between patient and physician, and which with us is asked for and given. Very seldom is it violated. Patients come to us for relief; they are willing to aid in the effort to secure it; those who are not, we decline to accept, and the result is—success.

It is sometimes asserted that all opium habitués are liars, and that, on presenting themselves for treatment they are always equipped with a syringe and supply. Such a sweeping assertion we do not believe, *we know it is not true*. Why, then, should we humiliate them after such a fashion, degrade them by imposing such detective surroundings? Others may, we will not; and as yet we have no reason to doubt the wisdom of our course.

Clandestine taking, either before or after withdrawal, can always be detected. The absence of certain invariable sequelæ of an honest quitting is positive proof of deception; while the presence of morphia in the urine after the time when it should disappear, along with other symptoms furnish added evidence beyond dispute.

It will again be inferred, and also aright, that we do not practise any such plan as Levinstein advises, when he says: "As soon as the patient has consented to give up his personal liberty and the treatment is about to commence, he is to be shown into the room set apart for him for the period of eight to fourteen days, all opportunities for attempting suicide having been removed from them. Doors and windows must not move on hinges, but on pivots; must have neither handles, nor bolts nor keys, being so constructed that the patients can neither open nor shut them. Hooks for looking-glasses, for clothes and curtains, must be removed. The bed-room, for the sake of control, is to have only the most necessary furniture; a bed, devoid of protruding bed-posts, a couch, an open wash-stand, a table furnished with alcoholic stimulants, champagne, port wine, brandy, ice in small pieces, and a tea urn with the necessary implements. In the

room which is to serve as a residence for the medical attendant for the first three days, the following drugs are to be kept under lock and key: A solution of morphia of 2 per cent., chloroform, ether, ammonia, liq. ammon. anis., mustard, an ice bag, and an electric induction apparatus. A bath room may adjoin those two apartments. During the first four or five days of the abstinence, the patient must be constantly watched by two female nurses."

Now what means this vigorous regime? First, that the lack of efficient medical measures makes essential physical force. Second, that the method employed entails such distress of mind and body as to risk a suicidal ending; and, that a great calamity always impends—collapse, that threatens life and demands that the doctor be close at hand to avert the dreaded danger.

In strong contrast with what has been quoted, during our opiate withdrawal patients are not only permitted but encouraged to go out and about, attend entertainments, and engage in social domestic pleasures; and this is continued throughout treatment, save a transient suspension following the first twenty-four hours of opium abstinence. After the first day of opiate disusing patients are, for a time, under careful attention, and, if required, an attendant is with them, but the need for service of this sort is usually quite limited, and in some instances entirely dispensed with. Again and again have patients presented, who fully expected the rigorous regime imposed by Levinstein, but who were happily surprised to find it was not demanded, and who were fully convinced, before their treatment ended, that it was not at all essential.

As between this method and the barbarous plan of those who counsel and compel heroic withdrawal, "comparisons are odious." In this day of advanced therapeutics, the writer holds radical opinions as to the *utter inexcusability* the *positive malpractice* of subjecting patients of this class to that torture of mind and body the German method entails. It is wrong, grievously wrong; more, it is *cruel* to demand that they shall run the gauntlet of such suffering.

In various papers we have expressed our views on this important part of the subject, and enlarged experience tends

only to confirm them. More and more pronounced is our belief 'that no physician is warranted, save under circumstances peculiar and beyond control, in subjecting his patient to the torturing ordeal of abrupt withdrawal.

"We care not who advocates it, but speak feelingly, emphatically and advisedly on this point, for the simple reason that our experience, again and again repeated, proves beyond all dispute that the opium habitué can be brought out of his bondage without any such crucial suffering as this method of treatment entails."

Bartholow says: "Having had one experience of this kind, I shall not be again induced to repeat it, if for no other, for strictly humanitarian reasons, since the mental and physical sufferings are truly horrible."

For proof of this and more in detail, the reader is referred to papers by the writer, "Clinical Notes on Opium Addiction,"—*Cincinnati Lancet and Clinic*, March 3, 1883. "Neurotic Pyrexia with Special Reference to Opium Addiction,"—*New England Medical Monthly*, June, 1883; "The Treatment of Opium Addiction,"—*St. Louis Courier of Medicine*, June, 1883; and "A Personal Narrative of Opium Addiction,"—*New York Medical Gazette*, July 1, 1883, reprints of which can be had if desired.

More, many, unaware that a more humane method is at command and dreading the ordeal of abrupt disusing refuse to accept it, and continuing their narcotic, bind all the more closely "the web that holds them fast as fate." During the past year, a medical gentleman nine years addicted to morphia came under our care. Six years ago he first consulted us. During this time he had read Levinstein's book, and the dread of such suffering as that author's patient underwent, was, he avowed, the reason for his delay in making an effort to quit the morphia. Finally summoning sufficient courage, though not without much apprehension, the trial was made and with most gratifying success, for greatly to his surprise and pleasure he made a notably good recovery with so little nervous disturbance that not a single bath was called for, and with such freedom from pain that not once was an anodyne demanded, and he was dismissed on the 26th

day of his treatment. Commenting on his case he declared the manner of his recovery seemed "almost miraculous," and asserted that, "had he ever thought so much could be accomplished at so little cost of time and discomfort his effort years earlier would have been made," and in a recent letter he wrote, "My own swift and easy passage of that one more river to cross is an ever recurring source of wonder and astonishment to me, and not a day passes, not a morning comes, without a keen sense of exultation at my escape from the old slavery, a blessed freedom from the old self-accusing conscience and a return of the old instinctive habit of looking every man straight in the eyes! I think I shall never entirely get rid of a certain shadow of the past; nearly nine years of mental distress, which I thought well-nigh hopeless, must leave a deep and ugly scar at my time of life, but thank God that I have *only* the scar to trouble my memory, and not the festering, corroding, ever present ulcer which made me unspeakably wretched, and kept me in continual fear of discovery."

Reference to this is made simply to support our statement and convince, it may be, some hoping yet dreading that scientific treatment has much to promise for their relief.

Before closing, let it be noted that this beyond question, is a vincible disease, and reassert, vide "Opium Addiction among Medical Men," that "repeated experience warrants the assertion that every case of opium addiction free from organic disease, and in which there is an earnest desire to recover, be the extent and duration what it may, admits of prompt and positive relief."

At the annual meeting of the St. Louis Obstetrical and Gynecological Society on Nov. 20, 1884, the following gentlemen were elected officers for the ensuing year: President, Dr. W. M. McPheeters; Vice-President, Dr. W. Coles; Recording Secretary, Dr. W. Hulson Ford; Corresponding Secretary, Dr. Geo. J. Engelmann; Treasurer, Dr. C. E. Briggs

CASES FROM PRACTICE.

ST. LOUIS HOSPITAL, SURGICAL DEPARTMENT.

Service of N. B. CARSON, M. D. Reported by PAUL Y. TUPPER, M. D.

FRACTURE OF SPINE.

Wm. M., American, æt. 32, hostler, of delicate physique, was admitted to the hospital August 19, 1884. Two hours before admittance he had fractured his spine in the following manner: In driving a loaded wagon under a low cross-beam at the stable, he lowered his head and bent his body forward to accommodate himself to the narrow space between the top of the load and the beam. In this flexed position, the back of his neck came in contact with the beam, and the wagon continuing to move forward, extreme flexion of the vertebral column and fracture in the lower dorsal region was produced. He was soon afterwards brought to the hospital in an undertaker's wagon, a somewhat suggestive mode of conveyance under the circumstances!

Examination disclosed the following condition: At a point corresponding to the tenth dorsal vertebra there was marked deformity, caused by the prominence and overriding of the upper margin of the fracture. The spinous process of this vertebra protruded to such an extent that the breadth of two fingers could be hidden beneath it. Moreover, when extension was applied, the portions of bone could be easily moved and osseous crepitation obtained. Below the point of injury there was complete motor and sensory paralysis. In catheterizing the bladder, which was filled, the introduction of the instrument was not felt by the patient.

It was decided to apply extension and counter-extension and put on a plaster of Paris jacket. The effort to extend by suspending the patient proved futile, as he fainted as soon as it was attempted. Anticipating this, however, he was carefully lowered to the

horizontal position, his shoulders and buttocks placed upon stools prepared for the purpose, and the extension and counter-extension maintained from the shoulders and hips. As an assistant supported the back at the site of injury and adjusted the fracture, the plaster jacket was applied. This extended from the axillæ well down upon the hips and was applied in the usual manner. It was supplemented by a well padded straight splint about three and a half by twelve inches, placed along the vertebral column. As soon as full extension was practised the patient experienced a "tingling" sensation in his lower extremities and was enabled to move his toes somewhat. Ordered catheter used every six hours.

August 20. Temperature and pulse normal. Rest disturbed by darting pains in lower extremities. Back comfortable. Surface impressions made upon the lower extremities, especially upon the inner aspect of legs, not accurately conveyed to and registered upon the mind. For instance, two knife-points applied to the surface exaggerated to four, etc. Has not voided urine spontaneously, but feels as if he could. One-fourth grain of morphia sulphate subcutaneously.

August 21. Had a good night. Lower extremities less painful. Normal sensation and motion returning. Voids urine naturally.

During the succeeding six weeks nothing worthy of special note occurred. Bowels acted sluggishly, requiring at times the exhibition of such aids as *nux vomica*, *caseara*, etc. The recurrence of chills and splenic pain, to which he was subject, occasioned some discomfort for a few days, but yielded readily to the usual remedies. At times he complained of superficial soreness along the spine as if the posterior splint was causing undue pressure. By this time almost perfect motion and sensation had been restored to the paralysed parts.

October 2. Removed jacket. Vertebral column strong and in good line. Slight prominence of the spinous process of tenth dorsal vertebra. No tenderness on pressure. Turns over and moves about freely in bed without pain.

October 11. Out of bed. No abnormal feeling, other than weakness of the legs. Flexibility of spinal column somewhat diminished. General condition good.

October 28. Discharged well. Wears a support about the trunk as a safeguard to the spine.

The speedy and satisfactory recovery in the above case no doubt

resulted from the prompt use of measures to restore the displaced column before the nutrition of the cord was impaired by pressure.

LYMPHO-SARCOMA OF NECK—EXTIRPATION—
LIGATION INTERNAL JUGULAR VEIN—
RECOVERY.

BY T. F. PREWITT, M. D., ST. LOUIS.

Henry Stahl, German, æt. 35, presented himself July 30, 1884, with a tumor on the left side of his neck as large as a child's head and having a striking resemblance to the human face from prominences and depressions, the result in part of cicatrices from a former operation. Patient had first noticed a tumor upon his neck something over two years before coming to me. In the following months it had grown to be as large as his fist. A prominent surgeon of this city then saw it, and as he states "lanced" it. Three weeks after the same surgeon lanced it again, and in ten days or two weeks after this removed it by operation. The growth subsequently returned and is now larger than when removed one year ago. Patient stated that at times there was some pain in it, and it interfered somewhat with deglutition from pressure upon esophagus. As will be seen from the accompanying cut, it was somewhat irregular in outline. It was solid and firm throughout the greater portion of its extent, but at one or two points presented an elastic semi-fluctuating feeling.

The integument moved freely over the surface of the tumor except at cicatrix of former operation.

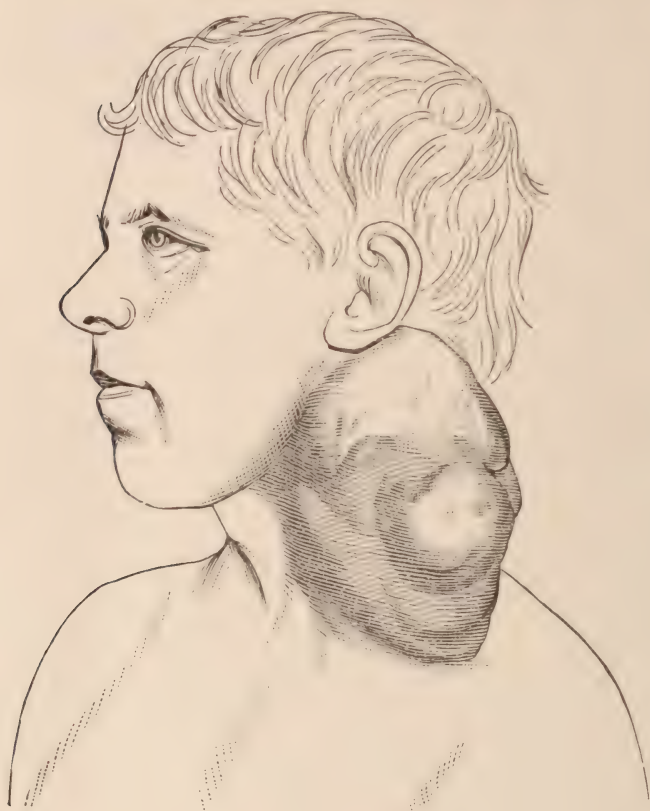
The tumor extended from the lobe of the ear to the clavicle and from near the median line in front to near the median line posteriorly.

The circumference of the neck over the most prominent part of tumor was eighteen inches. From median line in front to median line posteriorly on left side, the measurement was twelve inches; on right side it was six inches. A line passed over the surface of the tumor from the base anteriorly to base posteriorly, measured nine

and three-fourths inches; up and down it measured eight and one-fourth inches.

The patient, who had already begun to look somewhat pale, was anxious to have the tumor removed.

From the history of the case and the clinical features, a diagno-



sis of lympho-sarcoma primarily was made. The prognosis was most unfavorable, but as an operation presented the only hope of prolonging his life, it was decided to attempt it. It was certain that it dipped deep down into the neck, and it was probable that it was in intimate relation with the great blood vessels. This seemed the more probable as it was a recurrent growth. Still there was sufficient mobility to warrant the hope that it might

be dissected from important vessels and nerves and its removal accomplished.

July 2. An anesthetic (ether) having been given, elliptical incisions were made to include the adherent and scarred tissue, extending from the ear to the clavicle. As the operation progressed, it was found that portions of the overlying muscles—sternocleido-mastoid and trapezius—were adherent to and blended with the growth, there being no distinct capsule. An irregular cyst was cut into at a point in the tumor corresponding to the fluctuation upon the surface.

Numerous small vessels were tied, and as the base of the tumor was approached the utmost caution was exercised to guard against injury to the large vessels; nevertheless, while cautiously detaching the tumor from these with the handle of the scalpel, a sudden gush of dark venous blood, announced the most unpleasant fact that I had wounded the internal jugular vein. My own finger thrust into the breach, was replaced by that of an assistant and the dissection continued. When the whole mass had been removed, the jugular vein was compressed above and below, and a gaping wound a half inch or more in extent was found in its walls. A silk ligature was thrown around the vessel above and below, and it was then found that blood came from another breach in the walls at the junction of the facial veins. This required another ligature of the jugular above, and one of the tributary vessel. In spite of the vascularity of the parts, the extensive dissection, and the twice wounding of the internal jugular, the patient did not lose more than six or eight ounces of blood. The parts were now carefully washed with a ten grain solution of carbolic acid, a drainage tube laid in the bottom of the wound and the edges carefully approximated except at the lower extremity, where it gave exit to the drainage tube.

Antiseptic dressings were then carefully applied, and the patient put to bed.

August 4, 1 P. M. Found patient sitting up at the table eating as though nothing was the matter with him and looking perfectly well. Pulse 76, of good volume; temperature 99.6°, appetite good.

August 5, 1 P. M. Pulse 72, temperature 99.6°; says he is all right. No discharge from the wound, dressing not disturbed. Insinuated a pair of forceps under the dressing and removed the drainage tube.

August 6, 1 A. M. Temperature 100.4°; feels well; has been eating a little meat.

August 8. Temperature 99°, pulse good; removed the stitches; union throughout the greater portion of the wound.

From this time the progress of the case presents nothing of importance, and the patient left the hospital in August.

No cerebral disturbance followed the operation.

The dread of ligation of large veins once so prevalent in consequence of the teachings of Travers, Lisfranc, Langenbeck, Pirogoff and others, has not yet disappeared from the minds of the profession. The exigencies of the case so rarely demand the ligation of veins that we are not familiarized with the effects, as is the case with arteries. Yet the frequency with which the femoral and internal jugular veins have been tied with impunity, not to speak of those of less size—demonstrates that the procedure is as safe, all things considered, as is the ligation of arteries.

The injury of the veins which demands a decision of the question as to ligation or compression for the control of the hemorrhage is more likely to be followed by pyemia in the attempt to control it by compression than by the ligation. In fact the ligation of the vessel *per se* does not lead to pyemia, nor need we fear apoplexy as a result of obstruction of the venous return from the brain, where only the internal jugular vein of one side is tied. The real danger as pointed out by Prof. S. W. Gross in an admirable and exhaustive essay upon "Wounds of the Internal Jugular Vein" (*American Journal Med. Sciences* January and April 1867), is the same as that following the ligation of arteries—secondary hemorrhage. A microscopic examination confirmed the diagnosis of sarcoma.

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EDITORIAL.

DELICATE TESTS FOR URINE.

We have called attention from time to time to the observations made by Dr. Oliver and Dr. George Johnson in regard to certain tests for albumen in the urine which they claimed were reliable and much more delicate than the commonly used tests with heat and nitric acid.

Not long since Dr. Wm. Roberts, of Manchester, published a paper in the *Manchester Medical Chronicle* in which he asserted that in a considerable number of cases he had found precipitates by the use of these tests which have recently been brought into prominence in the urine of healthy persons in whom there was no symptom or indication of any renal disease, and in which neither heat nor nitric acid gave any albumen reaction.

Dr. George Johnson replies in the *British Medical Journal*, Oct. 11, that he has found by recent observations that citric and acetic acids throw down a slight precipitate or render urine more or less turbid by coagulating the mucin which is always present in a greater or less degree even in perfectly normal urine, and this turbidity cannot be distinguished from a minute trace of albumen.

Inasmuch as the acidulated brine, the tungstate of soda and the potassio-mercuric iodide require the addition of either citric or acetic acid before they will act as precipitants of albumen, it follows that these reagents cannot be relied upon to distinguish between mucin and albumen, and error may be caused by interpreting as an

albumen precipitate by one of these agents what is simply a mucin precipitate by the associated acid.

With picric acid, however, it is unnecessary to acidify the urine unless it be excessively alkaline, and picric acid when not accompanied with some other acid does not precipitate mucin. The only precipitates other than albuminous which picric acid causes are peptones, which Dr. Johnson has met only twice in the course of two years' work, and vegetable alkaloids, as quinine, when large doses are being taken. Inasmuch as these precipitates are readily dissolved by heating the liquid, while the albuminous precipitate is not so dissolved, there is no occasion for misinterpretation of the results of picric acid testing.

According to Dr. Johnson's conclusions, therefore, it seems that the picric acid test is more free from fallacy, as well as more delicate, than the tests by heat and nitric acid.

In the rare cases where the urine is so alkaline as to prevent coagulation of albumen by an excess of picric acid, the proper plan is to add sufficient citric or acetic acid to neutralize the alkali, then to filter and add the picric acid to the filtrate.

PREVENTION RATHER THAN CURE.

In view of the probability of a visitation of cholera the coming year in America the present experience of the profession in Europe is very obviously of deep interest. The Italians, who have been so fearfully scourged by the cholera, have come to conclusions that strengthen the dicta handed down to us from the past. In the words of Stefanoni: "*The only cure rational and preservative of cholera is to check the diarrhea on its first appearance.*" In a country invaded by the epidemic no abnormal intestinal movement ought ever to be neglected; from its first declaring itself the patient should be put to bed, since absolute repose combined with astringent treatment is the only available means of checking the serous flux of

the intestines. Fifteen drops of laudanum in a few teaspoonfuls of peppermint water is the one efficacious medicament I have seen used in the primary diarrhea; and this, it cannot be too often repeated, if attended to at once on its first appearance is certainly curable, while rigorously keeping the recumbent position in bed, regulating the diet, and drinking at frequent intervals and in small sips acidulated beverages like lemonade, or, if there be febrile heat, sucking from time to time bits of ice. Once the patient has neglected the treatment of the primary stage, medicine can do little more than confess her impotence, since, by the consensus of all practical physicians, there is nothing to do but await the setting in of an extremely uncertain reaction.''

PERIODICAL CHANGE IN THE CONDITION OF THE HAIR IN EPILEPTICS.

The dependence of variations in the condition of the hair upon the nervous system is well known. Changes in color, lustre, decadence, are observed in the result of affection of the innervation. Two cases are lately recorded of such marked recurring capillary variation in epileptics as to deserve special notice.

Dr. Raüber (*Virchow's Archiv*, vol. 97, July 9, 1884) details with much care a very extraordinary metamorphosis in the hair of the scalp: a fairly large, robust, and well nourished man of twenty-four years, suffered from his fifteenth year from epilepsy. His mother was an epileptic. Mentally, he is little developed, but manages to read and write. Cranium, as compared with the face, rather small. Hair of scalp abundant and light brown; beard and mustache not present but as a scanty down. The epileptic seizures at first occurred daily, then less frequently; post-epileptic stupor then appeared with hallucinations, which made necessary his entrance into the asylum 1881. During the winter up to March, 1883, he had two to five seizures monthly. One evening this month

it was observed that during the afternoon the hair had become curly, lustreless, and foxy red in a narrow strip, running from ear to ear along the anterior border of the scalp. Thence the change advanced backwards until twenty-four hours later the whole scalp was involved, attaining the maximum change on the second morning. The hair of the whole scalp which had been straight, shining, and light brown, was now transformed into a wooly hair without lustre, harsh to the touch, and foxy red in color. Under the microscope some of the hairs exhibited an open fibrous condition in spots, that to the naked eye were white nodules, "trichorrhæxis nodosa;" there were often seven to ten such disintegrated spots, also some hairs were split lengthwise, some in their whole thickness, others only partly through. There was also in places partial raising of the cuticular plates, and also of shaft fibres.

Pains had been felt in the scalp the day before the capillary change; the affected hairs could not be touched without pain. The scalp itself did not seem materially swelled or reddened. On the evening of the second day he felt for the first time unwell, went to bed and soon fell into general convulsions with spasm of the pharynx and respiratory tract. This lasted a half hour, when consciousness returned; on the third day the scalp pains began to disappear; on the fourth the hair, inversely to the abnormal change, began to straighten and regain its natural softness and color. Restoration in these respects was complete in about twenty days. In the third month following a new attack took place, though of but twelve days' duration. It was immediately followed by a third, and subsequently up to January, 1884, by others of varying intensity and length, the later attacks being slight. During one attack there was a catarrhal affection of the skin of the face and partial anesthesia in the territory of the upper cervicals and of the fifth pair.

A second case is reported from the insane asylum in Hamburg. A girl aged thirteen, idiotic, at the age of three began to be affected with chorea, the movements being chiefly confined to the

head and upper limbs. Epilepsy appeared between the fifth, and sixth years. Admitted into the asylum in 1880, she died there in 1882. While there she had epileptic fits about every eight or fourteen days, and also periods of agitation and calmness alternately, and of a week's duration; while in the former state there was turgescence of the face, pulse full, active transpiration, and at the same time the mental condition was one of extreme obstinacy. The hair, in addition, at such times underwent a change in color, becoming red, the color change commencing at the free ends and persisting for seven to eight days. When she fell into the state of calmness the hair became blonde, the alteration occurring in the space of two to three days; the paler hairs contained more numerous air spaces. Brain and spinal cord were found to be much altered.

TRISMUS NASCENTIUM.

In a little monograph recently issued (Vid. Book Notices, this COURIER), Dr. J. E. Hartigan urges upon the attention of the medical profession a theory concerning the cause, prevention and cure of trismus neonatorum, which was first suggested over thirty years ago by the late Dr. J. Marion Sims.

Dr. Hartigan adduces the result of special, careful study given to the subject for several years past under circumstances which afforded more than usual facilities for its prosecution. Numerous post-mortem examinations confirmed the views which he had adopted concerning the pathology of the affection, and the result of treatment in many other cases assured him of the correctness of these views and of the possibility of saving a large percentage of those who have heretofore been regarded as almost hopeless.

Dr. Hartigan's theory, or more strictly speaking Dr. Sims' theory, is that the causation of the disease is mechanical and that it is essentially a result of pressure on the base of the brain with consequent inflammatory action. He claims that in these cases it

will be found always that the parietal and occipital bones, instead of interlocking and mutually supporting each other, are so displaced that one overlaps the other, generally the parietals overlapping the occipital, so that when the child lies upon its back the weight of its head causes direct pressure upon the base of the brain and medulla oblongata. In some cases the displacement is in the opposite direction, so that lateral pressure causes the alarming symptoms.

The treatment recommended by Dr. Hartigan is simply postural. In the class of cases first mentioned he would have the child laid always upon the side. In the latter class of cases the posture should be upon the back. In some cases by careful manipulation the displaced bones can be restored to their normal relations. In some cases, on the other hand, the ossification is so imperfect that it is impossible to place the child in a position where undue pressure will not be produced.

Of course in cases where the disease has so far progressed that effusion has taken place, simply relieving the pressure will not terminate the trouble and such cases go on to a fatal termination in spite of all that may be done.

In such circumstances it is of the utmost importance that proper management should be adopted as early as possible. Hence this theory of Dr. Hartigan's should be widely known that, as the result of the experience of many observers, it may be confirmed or refuted, and so that if confirmed it may be made use of by those who are so situated as to see often those cases which under any other treatment hitherto proposed give a most distressing mortality record.

INTERNATIONAL COLLECTIVE INVESTIGATION OF DISEASE.

The subject of Collective Investigation of Diseases has already attracted a good deal of attention abroad. A committee of the British Medical Association has carried on this work for a number of

years, the results being published from time to time in the *British Medical Journal*. In no other way so well can the observations and experience of the many be formulated for the use of each as by a systematic collation of each one's experience, comparison and analysis by competent minds, and the publication of the results obtained.

This is a form of professional work and a means of professional advancement in which every practitioner may have a share and should feel a responsibility; and the importance of it is such that we cannot too strongly urge upon our readers to contribute each his part to the successful work of the American Committee of the International Medical Congress, appointed at the last meeting at Copenhagen. We give on another page a full statement of the plan proposed.

COCAINE HYDROCHLORATE, THE NEW LOCAL ANESTHETIC.

No discovery in medicine for many years has excited such enthusiasm as has now been aroused among ophthalmic surgeons by the discovery of the anesthetic properties of hydrochlorate of cocaine.

Cocaine itself, the alkaloid of erythroxyton coca, was discovered in 1855. The hydrochlorate is comparatively recent, and its anesthetic effect upon mucous surfaces has only been known for about a year, the first application of this having been made by laryngologists in Germany to blunt the sensibility of the vocal cords in laryngeal examinations and manipulations.

At the Ophthalmological Congress in Heidelberg recently a demonstration was made of its wonderful anesthetic effect upon the conjunctiva and cornea. Dr. H. D. Noyes, of New York, who was there present, wrote to the *New York Medical Record* a most enthusiastic account of the results obtained, and since then trials have been made by prominent ophthalmic surgeons in various cities of this country, and the universal testimony, so far as we

have observed, is in terms of the very highest commendation of the new agent.

It is used in the form of a two per cent. aqueous solution, Merck's preparation being that used by those whose reports we have seen. Of this solution two or three drops are dropped upon the scleral conjunctiva or instilled between the lids. In five minutes the application is repeated and after the lapse of another five minutes the anesthesia is generally complete, but if not a third application has invariably succeeded. The anesthetic effect lasts for twenty to thirty minutes and is such as to admit of operations for removal of pterygium, for the correction of squint, extraction of cataract, or the examination of injured eyes where there is strong blepharal spasm.

To what extent, if at all, it shall be found that this agent has local anesthetic effect upon other parts remains yet to be determined. It is a subject upon which theorizing is of no avail whatever, and only by experimenting and testing can it be ascertained. But even if it be only in the field already indicated, this is certainly a most important addition to our therapeutic resources.

FREEDOM OF ROME FROM CHOLERA.

While cholera has been inflicting so much harm in many parts of Italy, its chief city remains free from the plague. Visitors in Rome will be specially impressed with the excellent character of its abundant water supply. The purest of water spouts and jets from numerous mains and fountains, led into the city from distant sources. A precious heirloom from antiquity, these grand aqueducts, which date back to the time of ancient Rome, were so ably planned that modern chemistry pronounces the principal streams absolutely free from organic matter. In comparison with the water supply of other large cities in Europe, or even in the New World, that of Rome stands pre-eminent; and the fact of its present immunity with a most destructive pestilence at its gates, blazons a lesson in hygiene that is not a little needed; a lesson that the masses of citizens can un-

derstand and appreciate at its full value, while mere comparative analyses of water without the impressive mortuary illustration and closing argument would fall unnoticed. Pure water and complete sewerage is the condition of healthful life in communities; the matter needs to be insisted upon without ceasing, until the public is thoroughly indoctrinated, and evidences the fact by a resolution to perfect their water and sewerage systems, even though the initial cost be burdensome. The spectacle of our chief city resting content with such a source as the Croton rivulets, mere drainages of dairy farms and villages, or of Philadelphia drinking the foul current of the Schuylkill, that is nothing but a large open sewer! Such colossal examples of public apathy demand attention.

BURIAL OF LIVING VICTIMS OF CHOLERA.

An additional terror to the mind excited by a cholera epidemic is the possibility of burial of its victims before life is extinct. With every epidemic cases of apparent death are associated, and the reflection must arise that in the haste and general panic bodies are hurriedly buried before life is extinct, there being no external evidence of the persistence of vitality; where opium has been freely administered, this condition naturally is invited. During the present epidemic in Italy cases have been observed that in the algid stage were given up as dead, while life was still present. A notable case occurred lately in Genoa. A Dr. Canepa suffered an attack, rapidly sank into the algid state, and was apparently dead. The supposed corpse was duly prepared for burial but while the family were awaiting the arrival of the undertaker, six hours after he had been laid out as dead, the doctor appeared before the household reproaching them for their neglect of his wants. Restoratives were applied but too late.

It will be well for the authorities to bear in mind the possibility of such apparent death, and in their circulars of information issued at times of epidemic impress the fact upon the minds of the public.

REMOVAL OF AN IRON SPLINTER FROM THE EYE
WITH THE MAGNET.

Prof. Hirschberg (*Berlin, K. W.*, No. 38, 1884) read a paper before the Berlin Medical Society describing this interesting operation, it being the twenty-seventh case in his experience. A man aged 56, while driving an iron band on a vat with a hammer, injured his right eye. Inflammation ensued and subsided; the eye remained some months free from irritation. Six months from date of the accident fresh inflammation without known cause set in. When he came into the professor's hands, from the scars visible in cornea, iris and capsule, the entrance of a foreign body was plainly recorded, and from the history it was evident that the iron splinter was movable in the vitreous; since, were such a foreign body fixed in the posterior wall and total destruction of the globe did not follow through suppuration, the primary irritation would permanently cease; but, if after a period of calm a violent inflammation of the eye arises without known cause in the form of iridocyclitis, the splinter is freely movable in the vitreous, it may have been so from the first or have become so later. With difficulty the iron was detected and its position determined: it was inside the median vertical plane and below the middle.

Under anesthetics the eye was pierced in the direction of the splinter with a small scalpel to the extent of about 7 mm. But little liquid escaped; neither blood nor vitreous humor appeared in the gaping sclerotic wound. A bent electro-magnet 2 mm thick, was introduced, at first in vain, but on reinsertion it brought out the bit of iron, which measured about 3 mm. long and broad, of little thickness and weight $25\frac{1}{2}$ mgr.

The wound healed without irritation; and the lens was subsequently removed with good result for vision. Of the twenty-six magnet operations performed by the Professor during five years, most resulted excellently, vision being permanently restored.

BOOK REVIEWS AND NOTICES.

MALARIA AND MALARIAL DISEASE. By GEORGE M. STERNBERG, M. D., F. R. M. S. etc. 8vo.; pp. 329; cloth. *New York: Wm. Wood & Co. (Wood's Library.) (St. Louis Book & Stationery Co.)*

This is an exceedingly valuable number of Wood's Library for 1884. The author's extensive studies and experiments and his wide observation and experience have peculiarly fitted him for the preparation of such a work.

Those who have looked forward to the publication of this volume as one which would settle all the vexed questions as to the nature and causes of malaria will be disappointed, as the author recognizes very clearly the fact that our knowledge of the subject is as yet very imperfect and that much remains to be done yet in the way of experimentation and observation before we can hope to determine the answers to many of these problems.

Our author does present clearly and distinctly the facts which so far have been determined by the best observers in different parts of the world. He gives a full exposition and sharp criticism of the various theories in vogue concerning the intermittent diseases. It is a book that will be read with profit and advantage by all practitioners in malarious districts.

DRUGS AND MEDICINES OF NORTH AMERICA.

The October number of this quarterly publication of J. U. & C. G. Lloyd, of Cincinnati, contains the conclusion of the description of *Ranunculus bulbosus* and the greater part of the account of *Hydrastis Canadensis*. The illustrations in this number are excellent as have been those preceding. This publication continues to commend itself to professional favor by its intrinsic merit.

THE LOCK-JAW OF INFANTS; (Trismus Nascentium) or, Nine Day Fits; Crying Spasms, Etc.; Its History, Cause, Prevention and Cure. By J. F. HARTIGAN, M. D. 12mo.; square; pp. 123; cloth; 75 cents. *New York: Bermingham & Co., 1884. (St. Louis: J. H. Chambers & Co.)*

This little volume advocates a theory as to the causation of trismus nascentium which was first suggested by the late Dr.

J. Marion Sims. The author presents a large number of cases in verification of this theory and argues his proposition with decided ability. If the experience of others shall largely confirm his, he will receive high credit for having so forcibly brought to the attention of the profession this theory and mode of treatment of this intractable disease.

The publishers have well done their part of the work.

E. M. N.

OSTEOTOMY AND OSTEOCLASIS FOR DEFORMITIES OF THE LOWER EXTREMITIES, By CHARLES T. POORE, M. D., Surgeon to St. Mary's Free Hospital for Children, New York, etc. *New York: D. Appleton & Co.*, 1884, 8vo.; pp. 187; cloth. (St. Louis Book & Stationery Co.; J. H. Chambers & Co.)

Timely and practical, the book is divided into ten chapters treating of rickets as relating to deformities of the lower limbs, osteotomy in general, and the methods of making the operation; osteotomy for deformities of the hip joint, for genu valgum and varum, for ankylosis of the knee joint, and for tibial curves; statistics after osteotomies; osteoclasia; and closing with a bibliography and index; illustrated with fifty wood cuts and five lithographs.

On page 10, the author says, "He is not a believer in the spontaneous cure of the bending of long bones." No, generally not, but we have frequently seen extreme bow-legs in negro children straighten without therapeutic means being used.

In osteotomy doubtless Dr. Poore is indebted very largely to the teaching and recorded experience of Macewen. His book both in title and arrangement reminds us very much of that written by the latter in 1880. However he varies in some things, as the omission of Listerism, simply washing out the wound with carbolyzed water, 1 to 40, dressing with a strip of adhesive plaster, dusting the part with iodoform diluted with bismuth, over this placing a compress of cheese cloth, and a plaster of Paris bandage, preferring this to a wooden-splint. He emphasizes the importance, as suggested by Macewen, of removing any pieces of adipose or cellular tissue that may protrude from between the lips of the wound. We have also observed the advisability of this in tenotomy as in the sole of the foot. Tissue thus protruding interferes with primary union. Again, in the operation for genu valgum Macewen extends the limb, while our author flexes

the knee, and we believe the latter is preferable. The suggestion is made that before the plastic bandage sets the leg be carried not merely inward but even beyond the line of the femur—"over-correct the deformity." Neglecting this we have witnessed results not as perfect as they might otherwise have been.

On page 34, Dr. Poore very wisely condemns the attempt, after suppurative hip disease, to regain motion in the joint, or to forcibly straighten the limb to obtain improved position. Rekindling of the disease might thus be induced. In one case we knew a distinguished orthopedic surgeon by such attempt to fracture the femur. To correct deformity in such cases an osteotomy should be performed, preferably, as a rule just above or below the trochanter minor. "The amount of adduction should be considered more than the flexion" in determining an operation (p. 58); and better not attempt the formation of a false point at point of section but secure firm bony union.

Of genu valgum our author believes osseous changes to be the cause (p. 77.) Before the sixth year rickets is the predisposing cause; after the twelfth year it is not so (p. 80). The mechanical treatment is not satisfactory; however, if the tibia can be sprung with the hands a trial of braces should be made, to be desisted from if no improvement is obtained after a few months. Macewen's osteotomy operation, somewhat modified, is advised, fully described, and excellent results reported.

In genu varum, "an osteotomy should be performed at the point of greatest curvature in each bone and the bone in which the most marked bend exists should *always* be divided first." (p. 129.)

"True ankylosis of the knee joint in flexed position is best remedied by Buck's operation by removing a wedge-shaped piece which includes the articular ends of the femur and tibia, together with the patella, and immediately rectifying the position of the leg. * * * Really an excision of an ankylosed joint." (p. 133.)

For the rectification of tibial curves, if the bones are only moderately sclerosed, the plan of Mr. Howard Marsh of forcibly straightening the limb and putting it up in plaster of Paris is advised. But if the bones are hard an osteotomy must be made, linear if the curve is slight, curvi-form if great. The shape of the limb is corrected and a gypsum splint applied.

A chapter is given to osteoclasia, or the forcible breaking of the bone. The power of the hand will not be sufficient, so a *needle*.

ment of great leverage is used, as recommended by Rizzoli, Collin and Robin with the apparatus of the latter, which we saw successfully used at Lyons. Eighty-three cases are reported as having been treated with good results. It has not as yet been sufficiently tested in this country.

This chapter seems to have been more hurriedly and not as well written as other portions of the book.

While the diction of the work is not elegant, it is plain and clear, and thus commendable. Perhaps the use of the terms "I think" and "I do not think," occurring frequently throughout the book (v. p. 159), is in bad taste; statements thus prefixed lose the positiveness we like to see in an author.

We bespeak a large sale and a useful mission for the work, which is well printed in large type on good paper. A. J. S.

PHYSICIAN'S VISITING LIST, 1885. (Lindsay and Blakiston's) Thirty-fourth Year of its Publication. For 25 patients weekly, \$1.00; 50 do \$1.25; 100 patients \$2.00. *Philadelphia: P. Blakiston, Son & Co.*

From the standpoint of practical serviceableness, convenience and completeness this visiting list is not surpassed by any other in the market; and no other will probably be carried by so many physicians as this which has made many friends during the thirty-three years that it has been before the profession.

MEDICAL RHYMES. A Collection of Rhymes of Ye Anciente Time and Rhymes of the Modern Day; Rhymes Grave and Rhymes Mirthful; Rhymes Anatomical, Therapeutical and Surgical, all sorts of Rhymes to Interest, Amuse and Edify all Sorts of Followers of Esculapius. Selected and Compiled from a variety of sources by HUGO ERICHSEN, M. D., etc. With an introduction by PROF. WILLIS P. KING, M. D., Sedalia, Mo. Illustrated. 1884. 8vo.; pp. 220; cloth. *St. Louis, Mo.; Chicago, Ill.; Atlanta, Ga.: J. H. Chambers & Co.*

The aim and scope of this volume is fairly set forth in the title; and this aim seems to be well attained. Dr. Erichsen has shown considerable industry in gathering together these rhymes from so many different sources. It is a volume which will afford a deal of amusement and enjoyment to the doctor or to the patient waiting in the doctor's office for his turn for consultation.

The illustrations if some of the poems are exceedingly apt; others are rather far-fetched. Some of them are poorly drawn. Most of them should have had more finished execution.

The make-up of the book is on the whole very creditable to the professor.

MEDICAL RECORD VISITING LIST, or Physician's Diary for 1885. *New York: William Wood & Co.*

This elegantly bound visiting list is of convenient size and shape, is very compact and well arranged. The text is concise and practical and the compiler has used good judgment in avoiding all that is superfluous and omitting nothing essential. Those who use it once will be likely to seek it another year,

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS. By FRANK HASTINGS HAMILTON, A. B., A. M., M. D., LL. D., Late Professor of Surgery in Bellevue Medical College, etc. Seventh American Edition, Revised and Improved. Illustrated with 379 wood-cuts. *Philadelphia: Henry C. Lea's Son & Co.* 1884. 8vo.; pp. xxxi; 1005; sheep.

Praise of this standard book, now in its twenty-fifth year, would be fulsome. It has been the great work of Dr. Hamilton's long life; and if he had done nothing else to merit applause, this would stand a lasting monument of his untiring zeal and good practical sense. The fact that it has reached its seventh American edition, besides republication abroad and in foreign languages, indicates its worth and its appreciation by our profession. The author's failing health will probably never permit him to revise another edition, but we rejoice that he has been permitted to superintend this, as it contains additions and changes that enhance its value and bring it down to the present moment.

A former edition of the work has been noticed in the *COURIER* at the time of its issue, so that it is not necessary to repeat the encomium pronounced upon it then, but only to say now that whatever there has been new and practical in the late journals or treatises has been incorporated in this issue. To Poincot, translator and editor of the late French edition, credit is given of having brought together many lately recorded facts and of having added valuable suggestions of his own, which have been largely incorporated in this edition.

Such has been Dr. Hamilton's large experience and thorough familiarity with his subject that he is enabled as a teacher and guide to speak positively. His honesty has never been questioned and thus we can safely pin our faith to his.

From the beginning it has always been a feature of the work to largely illustrate the subjects by cases drawn from his own and the experience of others, thus making it very practical.

Our space will not allow us to individualize the chapters or sub-

jects that have received addition or modification because they are many. But those needing a work on fractures and dislocations can do no better than to obtain this, and we doubt not the present edition will be exhausted as rapidly as have its predecessors. A. J. S.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, UNITED STATES ARMY. Authors and Subjects: Vol. V. Flaccus—Health. *Washington: Government Printing Office, 1884. 4to.; pp. 1055; cloth.*

No words of special commendation are needed as we announce the fifth volume of the Index-Catalogue. It is a work which is invaluable and each new volume enhances the value of the rest. We hope that nothing will prevent the pushing this work through to completion at as early a date as possible. It is a work which is a credit to our country, the like of which has never been carried out in any other. All honor to the officers who conceived the plan and have carried it on thus far to a successful result.

OBSTETRICS. THE THEORY AND PRACTICE, Including the Diseases of Pregnancy and Parturition, Obstetrical Operations, etc. By P. CAZEAUX, Remodeled and Rearranged with Additions and Revisions by S. TARNIER. The Seventh American edition. Edited and revised by ROBERT J. HESS, M. D., with twelve full page plates, five being colored, and one hundred and sixty-five wood engravings. 1884. 8vo.; pp. 1081; cloth \$8; sheep \$9; half-morocco or Russia \$10. By Subscription Only. *Philadelphia: P. Blakiston, Son & Co. (St. Louis, J. H. Chambers & Co.)*

For many years Cazeaux's Obstetrics has been a classical authority, one to which all other writers on this subject more frequently make reference than to any other.

When the distinguished author died, it was the sentiment of those who had been intimately associated with him during his active life as a teacher that there was still a wide field of usefulness for his printed work, and it was arranged that the new edition should be edited and revised by Prof. Tarnier who was left at liberty to remodel it according to his own judgment.

The work before us is accordingly Cazeaux's teaching modified in some particulars by Tarnier, and brought into accord with the present status of French obstetric science by that eminent obstetrician.

The American editor has introduced a short chapter describing the immediate and late operations for laceration of the perineum in the place of the chapter devoted to the hygiene of the nursing, and has made additions at various other points. The additions

made by Prof. Tarnier are indicated by being printed in smaller type than the original text and by being inclosed in brackets. Several colored and plain lithographs and a number of other new illustrations, most of which are excellent, have been introduced.

This edition of Cazeaux forms the most complete and exhaustive work on obstetrics now within the reach of the English reading practitioner.

BOOKS AND PAMPHLETS RECEIVED.

The elements of Physiological and Pathological Chemistry; A handbook for medical students and practitioners. By T. Cranstoun Charles, M. D., etc. Illustrated with 38 engravings on wood and a chromo-lithograph. Philadelphia: Henry C. Lea's Son & Co., 1884. 8vo.; pp. 461; cloth.—Manual of Chemistry; A guide to lectures and laboratory-work for beginners in chemistry. By W. Simon, Ph. D., M. D. With sixteen illustrations on wood and seven colored plates, representing fifty-six chemical reactions. Philadelphia: Henry C. Lea's Son & Co. 1884. 8vo.; pp. 441, cloth.—A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A. B., A. M., M. D., etc. Seventh American Edition, Revised and Improved. Illustrated with three hundred and seventy-nine wood-cuts. Philadelphia: Henry C. Lea's Son & Co. 1884. 8vo.; pp. 1005; cloth.—Myths in Medicine and Old-Time Doctors. By Alfred C. Garrett, M. D., etc. New York and London: G. P. Putnam's Sons. 1884. Small 8vo.; pp. 243; cloth; \$1.50.—Medical Record Visiting list.—Leonard's Physician's Call Book.—An aid to Materia Medica. By Robert H. M. Dawbarn, M. D. 1884. New York: J. H. Vail & Co. 8vo.; pp. cloth. (J. H. Chambers & Co.)—The Science and Art of Surgery. By John Eric Erichsen, F. R. S., etc. Eighth Edition, revised and edited by Marcus Beck, M. S. and M. B., Lond., F. R. C. S., with nine hundred and eighty-four engravings on wood. Vol. I, 1884. Philadelphia: Henry C. Lea's Son & Co. 8vo.; pp. 1124; sheep. (J. H. Chambers & Co.)—Jequirity; Its Uses in Diseases of the Skin. By John V. Shoemaker, A. M., M. D. From Trans. Medical Society of the State of Pennsylvania for 1884. One Aspect of the Subject of Medical Examination.—Transactions of the Texas State Medical Association, Sixteenth annual session held at Belton, Texas, April 22, 23, 24, and 25, 1884. 8vo.; pp. —; paper.—National Conference of State Board of Health, held at St. Louis, October 13-15, 1884.—Asiatic Cholera in North America. Illinois State Board of Health, Springfield, 1884.—Practical Recommendations for the Exclusion and Prevention of Asiatic Cholera in North America. By John H. Rauch, M. D., Sec'y Illinois State Board of Health.—Lectures on the Principles of Surgery Delivered at Bellevue Hospital Medical College. By W. H. VanBuren, M. D., LL. D. (Yalen.) etc. Edited by Lewis A. Stimson, M. D., etc. New York: D. Appleton & Co. 1884. 8vo.; pp. 588; cloth.

REPORTS ON PROGRESS.

SURGERY.

Gastrostomy for Stricture of the Esophagus.—JOHN FAGAN, Surgeon to the Royal Hospital, Belfast, read before the section of surgery of the British Medical Association a paper on gastrostomy for stricture of the esophagus. He suggests the following rules for the performance of this operation:

1. In cases where the obstruction is partial, it should not be entertained in non-malignant cases so long as a bougie can be passed, or a tube worn to enable the patient to take sufficient nutriment. But should the passing or wearing of an instrument cause great irritation, while the difficulty in overcoming the obstruction is increasing, the operation may, I think, with justice be undertaken; for by it the affected parts are placed in a state of physiological rest, which tends not alone to improvement of the part, but renders it more amenable to other forms of treatment.

2. In cases due to malignant obstruction, where the dysphagia is becoming both painful and more marked, if the permanent wearing of a tube cannot be tolerated, there should be no time lost in performing a gastrostomy.

3. In cases where the obstruction is almost complete, and where in non-malignant cases bougies cannot be passed, and before the patient becomes too much exhausted and the digestive functions vitiated, the surgeon is fully justified in urging the operation.

4. In cases where complete obstruction has existed for a short time, the patient's strength being fairly sustained by enemata, and there is no malignancy, the operation may be undertaken with hopes of improvement; in malignant cases at this stage it should not be urged.

5. In the advanced stage of complete obstruction, no matter

what the cause be, the operation should not be undertaken, for the patient, if he survive the immediate shock from it, cannot live more than a few days, that are passed in increased discomfort.—*Brit. Med. Jour.*, Oct. 4, '84.

Chlorate of Potash in Treatment of Burns and Scalds.—J. WALTON BROWNE states that after having tried a great many different modes of treatment of burns and scars he has come to rely upon the application of a solution of chlorate of potash of the strength of five grains to the ounce. In superficial burns he orders the blisters to be opened, and bread and milk poultices to be applied every four hours until the cuticle has become detached. He then directs the application of the chlorate of potash solution upon pieces of lint covered with gutta percha tissue or oiled silk. When the lint adheres to the wound and is consequently removed with difficulty, he adds glycerine to the solution in the proportion of two ounces to the pint. In very deep burns poultices are to be applied until all sloughs have separated, and then the chlorate of potash solution. Lotions of the strength specified are to be used unless the granulations become weak, flabby or too luxuriant, when the strength should be doubled and the salt should be administered internally with tincture of the chloride of iron.—*Brit. Med. Jour.*, Oct. 4, '84.

Micrococci in Relation to Wounds, Abscesses and Septic Processes.—W. WATSON CHEYNE in his reports to the Scientific Grants Committee of the British Medical Association upon this subject summarizes as follows the chief points of interest:

1. There are various kinds of micrococci found in wounds treated antiseptically, differing markedly from each other in their effect upon animals. They agree in growing best at the temperature of the body and in causing acidity and sweaty smell in the fluids in which they grow. The experiments show that cultivations may be carried on in fluids with accuracy, provided the precautions mentioned be observed.

2. The micrococci tested in these experiments grew best in materials exposed to oxygen gas. They grew only with difficulty in the absence of oxygen. Eggs were not good pabulum.

3. Their effect on animals was not altered by growth with or without oxygen.

4. The effect of these micrococci on rabbits and man were not

similar, some of the most virulent forms for rabbits causing no deleterious effect in wounds in man.

5. The kidney is apparently an important excreting organ for organisms.

6. Organisms not capable of growing in the blood may yet cause serious effects by growing in the excretory canals. This may explain some cases of pyelitis.

7. Where an organism is not markedly pathogenic, it may be necessary to introduce a large quantity before morbid changes are set up.

8. Suppuration is not always due to micrococci; it may be caused by chemical irritants, such as croton-oil.

9. Micrococci are always present in acute abscesses and are probably the cause of them.

10. In some cases the micrococci are the primary cause of the inflammation and suppuration, as in pyemic abscesses; generally, however, they begin to act after inflammation has been previously induced.

11. This inflammation may be caused by an injury, by the absorption of chemically irritating substances from wounds, by cold, etc.

12. There are several different kinds of micrococci associated with suppuration.

13. Micrococci cause suppuration by the production of a chemically irritating substance which, if applied to the tissues in a concentrated form, causes necrosis of the tissue, but if more dilute, causes inflammation and suppuration.

14. The conditions in wounds and abscesses are not the same, inasmuch as in the former there is opportunity for mechanical and chemical irritants to work.

15. There is no reason for denying the existence of "antiseptic suppuration."

16. Tension may also cause suppuration, but it is perhaps most frequently aided by the growth of micrococci. These organisms need not be of a very virulent kind. It is also probable that the products of inflammation are themselves irritating and capable of exciting or keeping up inflammation.

17. The micro-organisms of septicemia, of pyemia and erysipelas, are different from one another and from those of abscesses. In erysipelas the micrococci grow in the lymphatic spaces. In py-

emia they grow in the blood to form colonies and emboli. In septicemia they may only grow locally, the symptoms being due to the absorption of their ptomaines; or if they grow in the blood they do not form colonies and emboli. Septicemia may also be due to other organisms besides micrococci.

18. There are no facts to support the view that it is the same micrococcus which, under different conditions, causes these varying diseases. The experiments of conversion of innocent into malignant forms, and *vice versa*, are unreliable.—*Brit. Med. Jour.*, Oct. 4, '84.

Prostatic Hypertrophy and Urinary Obstruction.—DR. A. B. PALMER advocates the treatment of the obstruction to free and complete evacuation of the bladder caused by prostatic hypertrophy without the use of the catheter by means of hydrostatic pressure, as follows:

"The urethra is filled with urine as in an effort at micturition. The penis is then grasped between the thumb and fingers of the patient near the glans, and sufficient pressure is made upon the urethra to resist the flow, and then by straining, as in an attempt to forcibly empty the bladder, the distention of the urethra is produced. This distending pressure is gentle, steady, diffused and painless, and may be applied and sustained at will; and in a majority of cases, if daily repeated for a time, and afterwards only occasionally, and if it is done thoroughly, and especially if commenced at an early period of obstruction, it will overcome this form of stricture effectually and without irritation and danger. It will in time, and generally soon, be followed by the power of more completely emptying the bladder, and with a fair, often a full stream."

Dr. Palmer claims to have obtained good results by this method of treatment during the last fifteen years.—*Phys. and Surg.*, Oct., 1884.

MEDICINE.

Herpes Laryngis.—DR. S. H. CHAPMAN has seen five cases of this disease in the last six years. He regards it as a neurosis closely allied to herpes of the pharynx and other mucous membranes, and differing from these only on account of the peculiar microscopic anatomy of the larynx. It seems to be one of the ec-

centric developments of malaria. It simulates tubercular inflammation, but can be readily diagnosticated by its extreme rapidity of development, the absence of fever, history of malarial affection, the previous or present development of herpetic eruption elsewhere, and the rapid disappearance of the disease. Its usual seat is the posterior surface of the epiglottis. The nervous system is always profoundly affected.—*N. Y. Med. Jour.*, Oct. 18, '84.

Hay Asthma in the Negro.—It has been commonly believed and frequently stated that the African race was exempt from susceptibility to hay asthma. Dr. Beard laid special stress upon this point as indicating that race was an important element in the etiology of that disease.

Dr. Jno. N. Mackenzie, however, reports a case of a colored man thirty-five years old, who has suffered for a number of years from characteristic attacks of hay asthma.—*N. Y. Med. Record*, Oct., 18, 1884.

Hamamelis Virginica in Hemorrhoids.—J. R. BLACK states that he has found this remedy a valuable one in the local treatment of hemorrhoids. Of course aggravating causes, such as very dry and long retained feces, diarrhea and obstructed portal circulation are to be avoided or removed. This being done, he finds great and prompting relief from the application of fluid extract of hamamelis (witch hazel) and an equal quantity of glycerine with enough starch or other excipient to render it easy of application.—*Med. and Surg. Reporter*, Oct. 4, '84.

Dobell's Treatment of a Cold.—DR. MULHERON recommends the following treatment of a "common cold," as first advocated by Dr. Dobell, of London, Eng., viz.:

1. Give five grains of carbonate of ammonia and five minims of liquor morphiae (B. P., morphiae gr. one-sixth) in an ounce of almond emulsion every three hours.

2. At night give one and a half ounces of spiritus Mindereri in a tumbler of cold water after the patient has got into bed and been covered up with extra blankets. Cold water should be drunk freely when there is thirst.

3. In the morning the extra blankets should be removed so as to allow the skin to cool down before getting up.

4. Let the patient get up as usual and take his usual diet, but continue the ammonia and morphia mixture every four hours.

5. At bedtime the second night give a compound colocynth pill. Usually about twelve doses of the mixture will be sufficient; but if there seems to be a tendency to a recurrence of the catarrhal symptoms it is well to administer six more doses and a second pill at night.

The beauty of this treatment lies in the fact that it does not interfere with the patient's business, and does not expose him to fresh attacks of cold which are liable to follow exposure to the outer air after a course of hot, stimulating, diaphoretic drinks.—*Med. Age*, Oct. 10, '84.

Hot Water as a Therapeutic Agent.—DR. AMBROSE L. RANNEY recently published an extended study of the observed effects of hot water drinking, the conclusion of which is as follows:

In summary I would urge a thorough trial of this therapeutical agent by the profession on the following grounds:

1. It is harmless if properly administered. A degree of temperature that can be endured by the mouth will not impair the integrity of the stomach. Absurd as it may seem I have heard this argument used by men of intelligence with every appearance of sincerity. Many of us drink coffee and tea at an equally high temperature, and in as large quantities as are compatible with the hot water treatment.

2. Its effects are comparatively uniform provided it be given for a sufficient period. Exceptions prove a rule. Isolated cases may be occasionally encountered where the results as stated do not occur.

3. It seems to exert a curative influence upon many of the chronic diseases that influence and disturb the proper assimilation of food. Some of these are important factors in the development of nervous derangements. I restrict my statements for hot water as yet chiefly to the cure of these diseases, because I have not scientific data upon which to base a broader statement. Subsequent investigation can alone decide to what limits the remedial use of this agent should be restricted.

4. It appears that the curative influence of hot water is not usually transient. In many of my cases the symptoms have shown no tendency to return when once checked by its use, provided that the patient's indiscretions do not lead to a relapse.

5. It may be employed as an adjunct to all recognized methods of treatment, without detriment to the patient.

6. It exerts a marked influence upon vascular disturbances of the

nerve-centres. Especially is this the case in my experience with those subjects that suffer from cerebral hyperemia and anemia. I have seen some remarkable results follow the protracted use of the hot water treatment in headache, vertigo, neuralgia insomnia and other conditions produced by vascular disturbances

7. In diabetes and in some kidney derangements have seen the most happy effects follow the internal administration of hot water. Its action as a diuretic is quite remarkable in some cases. It seems also to influence the secretion of urinary salts, since the specific gravity is modified often to a marked degree. The specific gravity of the urine is my guide in regulating the quantity of hot water for daily consumption.

8. As a laxative hot water has a slow but decided action. The feces are at first rendered black from an excess of bile, but they gradually change to a yellow color, and become more like that of the infant. It seems to be a justifiable deduction therefore that the functions of the accessory organs of digestion are made active by its use, and brought to the standard of health.

9. The skin is stimulated by the use of this agent and the cutaneous circulation is apparently made more uniform. I have seen the hue of the skin in disease altered by it and eruptions of a chronic character markedly benefited.

10. From a few experiments which I have made with reference to the effect of this agent as a preventive of sea-sickness, I am led to believe that it should be employed for from four to six weeks preceding an ocean voyage in accordance with the rules given earlier.

In conclusion I would state that if I have been led to express views that may appear extreme to many, it is because my convictions are based upon clinical observations of no inconsiderable magnitude. I have seen my previous failures in treatment turned by this agent into brilliant successes in some instances. In others, symptoms have been ameliorated by the use of hot water more rapidly than by methods of treatment universally recommended by text books. To what limits the value of this agent will be restricted, as a therapeutical adjunct, the results of collected observation and experience to date cannot fully determine. I shall await with interest the published results of the experience of others, who have doubtless employed this agent in various forms of chronic diseases, and especially those bearing upon the department of neurological medicine.—*N. Y. Med. Jour.*, Oct. 24, '84.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, August 19, 1884.

EXCISION OF INTESTINES.

Dr. Grindon presented the piece of intestine which he excised in a case of abdominal wound.

(For report of case, *vid.* October COURIER. p. 320.)

Dr. Carson.—This is certainly a very interesting specimen, and the more so from the fact that the case made such an uninterrupted and good recovery. It is very seldom that the surgeon is enabled in these cases to show the living and morbid specimen at the same time.

Dr. Steele —What became of your sutures?

Dr. Grindon.—That is something of a conundrum. I have reviewed the subject since I have been attending this case, and I see that there is a case given in Holmes' System where a surgeon applied a ligature closely around the duodenum of a dog, and I think about the fifth day after that the animal had a copious stool, in which the ligature was found. Whether in my case the ligatures were absorbed or not I do not know. The sutures which I put around the opening in the parietes have never been removed, I have looked all over for them and cannot find them. They were silk sutures.

Dr. Carson.—I think the silk ligature is the best. I have been reading a paper that was read before the American Medical Association, of a physician who has made numerous experiments on dogs, but he fails to mention what became of the sutures, if I am not mistaken. I cannot state just where I saw it, but I am under the impression it has been stated that the silk ligature finds its way into the intestine and is discharged.

Dr. Leete—I think *Dr. Grindon* was very fortunate in this

case in not having any obscure hemorrhage to deal with. The only case of the removal of a part of the small intestine that I was ever personally interested in occurred during the war while I was assistant to Dr. H. Z. Gill. We worked on the case as carefully as we knew how and cut out between eight and ten inches of intestine that was more or less torn by a bullet. Of course there was a limit to the exploration, but we thought it was safe to close the wound. We concluded that we had got the torn portion under view and we cut it out and joined the edges of the bowel with all the care that we could. The man died. We were working at a disadvantage, being on the march, and the operation was a tedious one, and we did not have all the instruments we might have desired. The patient, however, was a brave fellow who had gone through a great many hardships; and now, when the war was almost at an end, he got this wound. There was no escape of a drop of blood from that wound until we had almost completed the operation; but the moment we began to replace the intestine, there was a slight oozing, not much; and as often as we undertook to replace it, it was followed by this oozing. We finally closed the wound, and after forty-eight hours or so the patient died, and, as well as we could determine from the symptoms by reason of the small amount of internal bleeding. I don't remember that any post-mortem was made to determine whether we had removed all the torn portions of the bowel or not, but death occurred so slowly that we thought the inference a very reasonable one, that death was due in large part to exhaustion.

Dr. Grindon.—The entire wounded portion of the intestine was extruded; that was the most favorable feature of the case.

Dr. Carson.—I will ask the doctor how he treated the mesentery; by merely doubling it over? didn't you stitch it?

Dr. Grindon.—No, sir; I merely tied the vessels that were bleeding and doubled it in.

Dr. Carson.—The doctor speaks of the size of the wound allowing of the escape of fecal matter, saying that it was large enough to allow the escape of these matters. I see that by recent experiments it has been found that the smallest puncture of the intestine by a very fine needle will allow of the escape of fecal matter, and consequently fatal results have been known to follow such punctures, so that in case of sutures, puncture of the mucous membrane should be avoided, as those cases in which the sutures are carried

through are almost always followed by fatal results on account of the fecal matter escaping beside the ligature through the opening made by the needle which is not filled by the thread.

Dr. Leete.—It cannot be that that result is constant in view of the fact that there are cases on record in which extreme tympanites has been relieved by needle punctures.

Dr. Carson.—That is all very true, but Dr. Parkes of Chicago in his experiments found that the smallest puncture into the intestine was liable to be followed by the extravasation of fecal matter, showing that this practice of puncturing the intestine for distention of the gut to relieve tympanites is a very dangerous practice.

Dr. Leete.—Were not those experiments made upon animals which were perfectly healthy? and are not the conditions different in cases where the gut is and has been distended by gas for a considerable time? There must be a stage of inflammation there, and it may be a puncture made at that time is not attended with the same results which are likely to follow when made in the healthy gut. This makes quite a difference, and I would suggest that I have read somewhere and have been told by cattle men time and again that the practice is common when stock in the spring is first turned out to grass. They get into the luxurious clover and will sometimes, cattle men will say, swallow air in eating the tender clover, which gets into the gut in such quantities that fermentation is set up very quickly. I have seen cattle in this condition that were evidently in great pain, and I have been told, although I have not seen it done, I have heard them say that they take a pocket knife and deliberately puncture the gut and the air goes out with a great whiz. I have been told that this is quite a common practice and is never followed by bad results.

Dr. Carson.—I speak from experience of the escape of matter from punctures into the stomach and intestines. In 1881, I think it was, I performed the operation of excision of the stomach, and I believe I was the first one that attempted the operation here. A patient was at the hospital who appeared to have a tumor involving the pyloric extremity of the stomach, who was willing to have the operation performed, and in order to prepare myself for it I operated upon several dogs. It was not always we could get these dogs with empty stomachs, and I was surprised to find how readily the contents would penetrate by the side of the sutures through the needle punctures which were carried through the mucous membrane of the stomach.

Dr. Frank Glasgow.—It seems to me that when the puncture is made to let out gas from the intestine the fecal matter is always in a solid state and the contents of the intestine do not escape readily; that may explain the absence of ill results.

Dr. Carson.—The intestine is very much extended when the puncture is made through the surface of the mucous membrane the outer coat seems to slide over that and serve as a valve; we might account for it in that way, I think. But I know very certainly from observation of these cases that the fecal matter is likely to protrude by the side of the sutures. I have been using needles which I have ordered from New York for this purpose especially. They are nothing more than surgical needles shaped as the ordinary sewing needle; nothing more than ordinary sewing needles.

Dr. Grindon.—As to the puncturing of the gut, I remember a case which Dr. Schenck will call to mind. The superintendent of one of our institutions had a cow with considerable distention of the abdomen. He tapped this cow. He didn't get any water, but he got plenty of something else. The cow died in a short time.

As to the escape of fecal matter from a small puncture in the intestine, perhaps my case would bear on that in this way: in putting in the sutures we not merely punctured through the peritoneal coat as recommended, but right through all the layers, including the mucous coat every time, and whether it was the swelling of the thread by soaking in the fluids that closed the opening, or what it was I don't know; there were no bad results. I think if there had been any extravasation of fecal matter into the cavity peritonitis would have resulted. I see that a writer in Holmes' System says, that it really makes no difference whether the peritoneal surfaces are brought together or the mucous surfaces, because in any case, according to him, union is not by first intention and adhesion, but there is a considerable exudation of plastic material and a new formation of tissue, and that exudation of plastic material, which would be of course on the outer surface, will close up the opening, and we will find in such cases, although there should be no union of the mucous surfaces, that this exudate will close up the opening and probably cause the intestines to adhere in their place. This has been found to be the case where post-mortems have been made.

Dr. Carson.—It has been said that the extravasation from the pedicle of removed ovarian tumors takes place in that way, and so

we may account for the fact that sutures find their way into the intestines. Parkes in his experiments made no such observation; he speaks and makes a point of the fact that sutures should not penetrate the mucous membrane; and not only Parkes has found this to be the case, but it has been the experience of other operators; so that it is now considered not the proper thing to puncture the mucous membrane. Of course it is not in all cases that this exudation will follow the introduction of ligatures, but nevertheless it adds to the chances of a successful termination of your case, if you puncture through only one of the coats.

Dr. Frank Glasgow.—It occurs to me that the character of the contents of the bowel has a great deal to do with the question whether there is any exudation or not. I recall a case of puncture that I read some time ago where a man was shot through the back, the bullet passing through a coil of the intestines. There were no bad symptoms of mechanical injury of the intestine. On the fourth or fifth day after there was a fecal discharge from the wound and a fecal fistula was established. The man never had peritonitis or trouble, never had exudation into the peritoneum.

Dr. Leete raised the question whether silk ligatures swell in soaking in fluids.

Dr. Carson.—Sometime ago I presented a suture that I had allowed to remain in the stump of an amputated limb. When I attempted to remove the sutures at first, I failed to do so; and the thought struck me that I would allow them to remain and see what would become of them. They remained in the stump over three months; the stump healed up all around and left them still hanging. I was very careful in handling the parts, and I found finally that they had been absorbed up to the surface. Now in those ligatures there was certainly an increase in the calibre of the ligature. I think I can safely say, as the result of observation, that there is a slight increase in the circumference or size of the ligature generally.

VAGINAL THROMBUS.

Dr. Glasgow.—I will report a case that I operated on the other day, a case of thrombus or hematocele in the tissue surrounding the vagina. This was on the left side about one third of the way from the pubes down, and she reports having had a tumor on the other side of the vagina which disappeared. This one, when I saw it, was about the size of your fist, pushing the labia downward, not in the labia itself but in the lower and posterior portion of

the vagina; it was very much swollen, hot, and I think probably had gone on to the formation of abscess. The woman had fever and looked very much debilitated; the breasts were in rather bad condition, rather hard and tender. Not exactly in the lowest portion, but a little below the middle line of the vagina, I made an incision about an inch and a half long and turned out a dark clot of blood in which were streaks of pus. This opening before I finished emptying the cavity had reached up quite high, maybe almost three inches alongside of the vagina and downward, also back of the labia. I had reached in front to break up the clots and turn them out, and before I had finished this the opening, which was large enough to put two fingers in at first, had contracted down so that I could hardly get one in when I got through. I washed out the clot, and after washing and cleaning it out thoroughly I injected some linseed oil in which was placed enough iodoform to make the oil yellow when shaken up, probably half a dram to two ounces of oil. The next day I saw it there was no pus formation at all, and after the third day I placed in a tube and injected this mixture of linseed oil and iodoform. Now this opening has entirely closed, so there is no room for the tube or anything else. I opened it Sunday a week ago and immediately closed it again.

Dr. Schenck.—There is a great difference between thrombosis produced by parturition and hematocele. In thrombosis after parturition the rule is to open it. The mortality in thrombosis has been very much improved by the free opening of them. I reported some time ago a case of very large thrombosis occurring in a woman eight days after parturition. The patient is now entirely well.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, Oct. 16, 1884.

Dr. McPheeters read the paper of the evening, on the "Management of Natural Labor so as to Secure the Best Results." (Vid. p. 481.)

Dr. Boisliniere thought the paper an excellent one, covering commonplace but most important ground. Nature, he said, is adequate to her work only when normal conditions are present during labor. Delay is dangerous when operations become nec-

essary, and operations are often rendered impossible by procrastination. The doctor confessed he habitually approached a case of labor with a certain trepidation. Deviations from a normal course are very often observed, and are usually fraught with danger. The doctor advocated quinine in slow cases. He made some very interesting remarks with reference to the position of the woman during labor and the treatment of its various stages. The use of hot cloths to the perineum was strongly advocated by the speaker, and lateral incisions of the vulva recommended when the perineum is threatened. In occipito-posterior positions of the head he advocated rotation by means of the forceps, the perineum being here particularly jeopardized if rotation cannot be otherwise effected. The doctor also advocated the use of chloroform during labor to assuage pain and promote the relaxation of the perineum.

He endorsed Peyot's rule not to administer ergot until the "uterus is empty," except in some rare cases, after labor continuing to give the drug three or four times a day in half a teaspoonful doses for a week.

Dr. Yarnall expressed his gratifying experience in the use of repeated vaginal injections of water during its progress. The perineum when ruptured should be sewed up immediately, and if primary union fail, the suturing should be repeated even after a week or ten days. *Dr. Y.* spoke of a case of marginal placenta previa where eventually delivery; without hemorrhage, occurred after tamponing, and also of one of central implantation of placenta previa which also terminated happily to both mother and child.

The speaker then exhibited the latest modification of Tarnier's forceps, and also an adjustable blunt hook, and read a letter from *Dr. Simpson*, of Edinburgh.

Dr. Engelmann stated that *Dr. Simpson* uses the ordinary forceps to which the axis-traction principle had been adapted, this being *Dr. Simpson's* own original forceps.

Dr. Gregory observed that it was important to have some definite understanding as to the immediate indication for intra-uterine injections.

Dr. Papin spoke in highly eulogistic terms of *Dr. McPheeters'* paper. He advocated the supine position during labor for various reasons. Some cases of supposed rigidity of the os are really those of premature pains susceptible of being arrested by opiates.

He spoke of a case where ether was administered for eighteen hours, successfully, the difficulty being due to rigidity of the soft parts, some narrowness of the pelvis and an unusually large head. He uses anesthetics whenever practicable, during the second stage, and sooner if the patients are very restless. The doctor prescribes opium in combination with chloral in cases of rigidity, especially chloral in 40 gr. doses. He spoke of fifteen cases in his own practice of prolapsed funis treated by the postural method, of which thirteen were saved. Ergot he administers after labor in repeated doses, but not so frequently thus far as has been recommended. The prevention of sore nipples he affirmed may be attained by a preparatory suction of the nipple for some weeks before labor. He asserted that the nipple may in this way be early developed and a full supply of milk after delivery secured. The doctor also advocated free nourishment after labor.

Dr. Prewitt spoke of the danger of septic infection after operation, where co-aptation is not perfect, some passages and pockets being left between the loosely approximated surfaces where fluids may lodge, and of the difficulties of obtaining perfect coaptation. The doctor spoke of a case where the perineum being lacerated, the vaginal mucous membrane was also torn for about four inches upwards. Apprehending difficulty in securing a good approximation of the vaginal rent he concluded not to operate. The patient on the third day had a considerable fever. The douche and suppository of iodoform were employed. The rent closed to a considerable extent, but no further operation has yet been done. He also expressed himself strongly in favor of artificial respiration according to Marshall Hall's and Sylvester's methods persisted in as long as the heart beats, where the infant fails to respire.

Dr. Engelmann expressed himself strongly in favor of administering ergot only when the uterus was empty. He spoke in favor of surgical interference in all cases where the perineum was ruptured, and affirmed that the risk of sepsis was at least fully as great where no operation was attempted as when coaptation was as completely effected by operation as was possible. Efforts of reposition of the prolapsed cord, he said, have now completely failed in the hands of the most expert operators, and immediate delivery, if possible, or version has become the most authoritative rule of practice.

Special Meeting, November 6, 1884.

DISCUSSION OF DR. MCPHEETERS' PAPER CONTINUED.

Dr. Gregory.—The paper which Dr. McPheeters read was very interesting, but I think there are a great many practitioners of midwifery who never use intra-uterine injections. I am satisfied that a great many people die of septicemia, who could have been saved if intra-uterine injections had been made use of, and I think there is a general feeling that intra-uterine injections are dangerous. This is constantly published, and the possible dangers of intra-uterine injections are held out to the profession. Death has not infrequently occurred from an intra-uterine injection, and yet the doctor spoke of it as a matter of common practice. I am inclined to believe that if we had the practical experience of the members with regard to this matter, the paper would be read with more interest and profit by many practitioners who might thereby be interested in the subject of intra-uterine washings and thus be able to save more lives. Some years ago a patient of mine died from an intra-uterine injection. I had been treating her for an intramural fibroid for some weeks, dilating the os with sponge tents until I felt that it was possible to enter the womb; then I took my friend Dr. Pope with me to assist me. After examination Dr. Pope thought that it was not proper to attempt to remove the tumor, and the operation was foregone. The patient then asked me if I could do anything more for her. I had just been reading in the journal that hemorrhage, which was the most important symptom in her case, had been materially ameliorated by the use of iodine injections, and I therefore proposed this measure to her. The womb had been so fully dilated that we could put two fingers into the os and feel the tumor. She consented and was placed upon the floor and an injection of diluted tincture of iodine given. Just after the injection, while I was cleaning my instruments, she raised up and looked so pale that I said, "You better lie down a few minutes, you look very pale, you may faint," and she attempted to lie down and fell backward, her head making a thump upon the floor. I just looked at her and said, "That is a first-rate position to assume." But I soon discovered that she was breathing hurriedly with some noise, and I went to her and found she was gasping, and she died in a very short time. She never uttered a word, and did not breathe more than ten minutes after the injection, I think. Of course it is very natural whenever I hear of intra-uter-

ine injections, for this case to come vividly to my mind, and I think it is not to be wondered that I should hesitate to use intra-uterine injections. But I am convinced that that woman had poisonous matter in the womb which it was necessary under any circumstances to wash out. It is certainly necessary and proper to wash out the womb if it can be done without any danger; and that it is done without any danger and is constantly done there can be no question, because we read of it everywhere; and people who have not had my experience are ready to express astonishment that anybody should hesitate about doing this thing. But I have read of other cases besides my own in which intra-uterine injections have proved disastrous. In my own case no one happened to be in the room at the time but myself, and the patient died before any one else entered the room. I did not use chloroform. Her husband was in the next room, and I called to him immediately, but he did not come; he never dreamed of the possibility of such a fatal accident. This patient was about forty years of age, and a nullipara. It does seem to me that when there is an offensive discharge from the vagina it is a fair inference that it is furnished by the womb; and a positive indication for the use of intra-uterine injections is furnished by the concurrence of fever with an offensive discharge from the vagina. The best nozzle for a syringe would be a soft flexible catheter. After passing that into the womb, inject the fluid so that it shall flow out freely. The simplicity of this instrument is much in its favor, because people who would practise these washings in the country have not at hand any special apparatus. The post-mortem was made by Dr. Pope, Dr. Hammer and Dr. Hodgen. Dr. Spiegelhalter was coroner at that time, and he treated me very kindly. I went to him and told him what had happened, and he had a jury of physicians, and at my request summoned these several gentlemen whom I have mentioned and others. They witnessed the post-mortem and there was nothing that could account for death; there was no sign of any of the fluid beyond the womb; there was no break of continuity of the tissue of the womb; there was nothing that was palpable as the cause of death, and it was declared to be the effect of fatal syncope.

Dr. McPheeters.—Death was too rapid to be caused by anything else than shock.

[TO BE CONTINUED.]

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Polyclinic service of CHAS. K. MILLS, M. D. Reported by
DR. WM. MUIR ANGNEY, Clinical Assistant.

DUPUYTREN'S CONTRACTION OF THE FINGERS.¹

Dr. W. W. Keen, in one of the most valuable papers on "Dupuytren's Contraction," published in recent years, states that he was able to find, exclusive of his own cases, twenty-six in number, only ninety-five other recorded cases. It has been therefore thought worth while to put the following additional case briefly on record. The history points to rheumatic or rheumatico-gouty origin of the affection.

H. B., æt. 70, married, born in Ireland, had one sister with a rheumatic history. His father died of pleurisy, and he did not know the cause of his mother's death, or any details of the health history of either parent. He denied syphilis positively, and never injured his hands in any way. He has kept a trimming store for twenty years, and before that time was in the grocery business. He was in California thirty-five years ago, being one of the "Forty-niners." He slept in a tent, and mined for gold for twenty months, but apparently did not suffer, or at least not immediately, from the exposure. For fifteen years he has suffered with rheumatic or rheumatico-gouty pains.

• Twelve years ago the little finger of the left hand began to curve inward; contraction soon followed in the ring and later in the middle finger. The little finger of the right hand also gradually contracted.

When he presented himself at the Polyclinic, the joints of his hands and fingers were found to be enlarged. The little finger of the right was strongly flexed; but the trouble was much more marked and extensive in the left hand, the little and ring fingers being drawn in so as to almost touch the palm of the hand, the second finger also being much contracted. (See fig. 1.) Ridges were found running to these fingers across the palm. The general strength of both upper extremities was about the same. He had never had any special treatment for the contraction.

1. For the use of these cuts we are indebted to the courtesy of Messrs. P. Blakiston, Son & Co., of Philadelphia. [Ed.]

Subcutaneous incisions were made into the palmar fascia and its cord-like prolongations, by Dr. John B. Roberts. In all eight incisions were made at a single sitting. The hand was straightened, and kept on a digital splint for six weeks, manipulations also being used. The splint was then used only at nights, and galvanism was applied in the form of the continuous current through the hand, and the current interrupted to the interossei and other muscles. The hand is now capable of being straightened, as shown in fig. 2, and he also has much improved use of it in flexion and extension.



FIG. 1.



FIG. 2.

DISCUSSION ON CASE OF DUPUYTREN'S CONTRACTION.

Dr. Mills.—Many surgeons refer all such cases to traumatism. The chief interest in them is the pathology and causation. I believe that most cases of true Dupuytren's contraction are due to rheumatism or rheumatic gout. Hysterical contraction, sometimes resembles it, but continuous nerve pressure on the median nerve will relax this form, although it will subsequently return. Some of the cases called athetosis also resemble it. Here there are no ridges across the palm, and the contractions may be readily overcome temporarily.

Dr. John B. Roberts.—This case shows facts in opposition to the theory that adopts traumatism as a causation, for he now is under treatment for chronic arthritis of the fingers. It is a pity that the name Dupuytren is given to this form of contraction, for if we call it contraction of the palmar fascia we at once separate it from the contractions of tendons. A proof of its rheumatic origin is the frequency of its occurrence in those who do no manual labor.

Dr. Angney.—The history of the case shows no traumatism. The man had been a shopkeeper and had the trouble ten or twelve years before consulting a physician. Rheumatism and gout were concerned in the etiology.

CURE OF CROOKED NOSES.

DR. JNO. B. ROBERTS presented a patient on whom he had operated for the repair of a crooked nose by a method which he had himself devised. His account of the operation is as follows:

Replacement of the deformed structures in this case was very simple. With a scalpel introduced through the left nostril, I perforated the cartilaginous septum at its upper and back part, and made a long incision through it in a direction downwards and forwards. This permitted me to push the whole cartilaginous portion of the nose to the left, and overcome to a great extent the lateral deformity. To retain the parts in this position, I introduced a steel pin about one and one-fourth inches long, into the right nostril, and passed it completely through the anterior and upper segment of the divided septum, near the columella. Having the movable portion of the septum thus transfixed, I was enabled, by carrying the head of the pin to the left, to move the anterior part of the nose to the left, and retain it there by imbedding the point of the pin deeply in the immovable cartilaginous septum and mucous membrane at the back of the left naris. In other words, I incised the deformed cartilage, and pinned it in position very much as you would pin a flower in the button-hole of a coat. There still remained a little deflexion of the end of the nose to the right, which seemed to be due to malposition of the lateral cartilage close to the right nasal bone. With a tenotome in the right nostril, I pared the cartilage loose without perforating the skin, and pinned the parts over to the left by a second pin inserted from the cutaneous surface of the dorsum on the right of the median line. The point of this pin was fixed by having its point imbedded in the tissues of the left naris. It is the head of this second pin that is

covered by the small square of court-plaster. The correction of the angular deformity of the septum removed most of the occlusion of the left nostril, which had greatly annoyed the patient.

REPORT ON THE PREVENTION OF EPIDEMIC CHOLERA IN AMERICA.¹

[Adopted by the American Public Health Association and the Conference of State Boards of Health.]

To the Conference of State Boards of Health:

MR. PRESIDENT AND MEMBERS: Your committee, to whom were referred papers relating to the practical work required for the prevention of epidemic cholera in this country, respectfully report as follows:

ORIGIN AND DISSEMINATION.

There are three essential factors to the prevalence of cholera in this country as an epidemic,—(1) the importation of the disease by means of ships more or less directly from its only place of origin in India; (2) local unsanitary conditions favorable to the reception and development of the disease; (3) persons sick with the disease in some of its stages, or things infected by such sick persons, to carry it from place to place. These three factors naturally suggest the methods of combating the disease, for which there is needed practical work,—international, national, and inter-state, state, and local. So far as relates to state and local boards of health, their organization and activities are greater than ever before; but it must be admitted that, after cholera has been introduced into a country, inland quarantines are not easily and successfully maintained, although efforts in this direction are then advisable.

1. This report was prepared at the conference of State Boards of Health in St. Louis October 14, 15, by a committee of five to whom were referred the papers read before the conference for the purpose of formulating a report embodying the method approved by the conference for combating cholera. The committee consisted of Drs. Baker, Rauch, Walcott, Bryce and Herrick, representing respectively the Boards of Health of Michigan, Illinois, Massachusetts, Ontario and Louisiana.

In view of the threatened introduction of cholera into this country during the coming year, and the consequent immense waste of life and property values through derangements of commerce, trade, and productive industries, it is the sense of this conference that the general government should maintain such a national health service as shall, by rigid inspection at the port of embarkation, question the freedom from disease and infection of all persons and things from infected districts, and shall secure the surveillance of such persons and things while on shipboard, and, when necessary, detention at quarantine stations on this side for treatment and disinfection.

OFFICIAL INSPECTION.

In view of the present threatening aspect of Asiatic cholera, and the constant danger from other communicable diseases occurring at foreign ports having commercial relations with the United States, we urge upon Congress to provide for the appointment and maintenance at all such foreign ports where cholera, yellow fever, plague, small-pox, or scarlet fever exists, or are liable to exist, of medical officers of health, the same being either accredited consuls, or attached to the consulates. The duties of these officers shall be to give notice, by telegraph when practicable, of the existence or appearance of any of the above named diseases to some constituted authority in this country, to give notice of the departure of any vessel known or suspected to be infected for any port in the United States; and, whenever requested by the master of any vessel about to load or leave for this country, to inspect thoroughly such vessel in all her parts, and also her cargo, her crew and passengers, to use such cleansing and disinfection as he may deem necessary, and to satisfy himself that all persons about to sail are free from dangerous communicable diseases, are not recently from infected places, and are properly protected from small-pox, giving to her commander a certificate of the inspection and of all precautionary measures taken. And it shall be the duty of the central authority in this country promptly to transmit intelligence of the existence of the above mentioned diseases at foreign ports and places, and of the departure of dangerous vessels for the United States and Canada, to all state and local health authorities in the country which may be interested in the same.

We further recommend, in case of those foreign ports which have no consular agents of this country or no telegraphic commu-

nication with this country, and which are liable to transmit pestilence through commercial intercourse, that one or more medical officers be chosen to visit such ports as often as may be deemed necessary by the central health authority in this country, so as to give trustworthy information of the health and sanitary condition of those places.

CANADIAN HEALTH ALLIANCE.

Inasmuch as the Dominion of Canada is equally interested with the United States in protecting itself and the United States from the importation of dangerous diseases, we suggest that Congress take such measures as will bring about concerted action with the Dominion and the British government, by which the consuls of this country or of England at foreign ports shall examine and take such action as they may deem effective, and notify the authorities of such government as has authority over any port to which any ship may sail in the United States or Canada, in order that such government may be in a position to take effective measures against the importation of these diseases.

We are gratified that the authorities of the Dominion of Canada and of the Province of Ontario have taken active steps toward protecting the people of Canada, and indirectly those of the United States, by the adoption of extensive quarantine regulations. We feel, however, that with respect to those regulations regarding the landing of passengers from the mail steamers along the St. Lawrence, etc., further special regulations for the thorough disinfection of the baggage and effects of all passengers, cabin or steerage, as come from infected ports or places, should be carried out in a similar manner to that recommended by the National Board of Health. Believing that the importation of cholera into this country has usually attended the presence of immigrants from infected countries, we therefore recommend that all such immigrants be prevented from landing at our ports until such time as the danger of the introduction of cholera by them shall have passed.

The inspection and quarantine service inaugurated by the National Board of Health, and set forth in the paper by Dr. Smart before this conference, but which system is now inoperative for want of an appropriation by Congress, meets with our cordial approval. To enable these protective measures to be carried out, we recommend that Congress be urged in the strongest

terms to legislate on this subject at an early date in its coming session, and to appropriate such funds as may be needful. The expenses incident to the work which has to be performed at foreign ports, and the establishment of refuge stations at points on our own coast for the detention and treatment of infected vessels arriving from foreign ports, should undoubtedly be borne by the national government, and not by individual states or municipalities; for the benefits accruing therefrom are general, and not restricted to localities, although some ports and cities on the coast may have a more immediate interest in the matter than others in the interior. It is probable, however, that this national protective work may not be sufficient.

LOCAL SAFEGUARDS.

It will undoubtedly delay and lessen the chances of invasion, but it may not prevent invasion. The poison of the disease is subtle, and may effect an entrance into the country at some unguarded point. The funds necessary to the stamping out of the disease in a particular locality, and to the prevention of its spread to other localities might in some instances be borne by the municipality or state affected: but should the disease occur in a locality which has failed or is unable to make provision for the occurrence, its spread to other cities and states would be imminent. The want of means at the infected point would be disastrous to many others. Congress has recognized the necessity for aid to state and local boards of health under similar conditions in the case of yellow fever. In 1879 the sum of \$500,000 was appropriated, and placed at the disposal of the National Board of Health; and the records show that of this sum \$160,000 was employed in combating the epidemic of that year. We therefore recommend that the influence of this conference be used with the view of having appropriated by the national legislature the sum of \$500,000, to be used, or as much thereof as may be needful, in case of a cholera invasion, in stamping out the disease from the infected localities, and in preventing its spread from state to state.

The removal of local unsanitary conditions favorable to the development of cholera is the special work of state and local boards of health. Much has been done already in some states, but much remains which should receive immediate attention. Where it can be done, state sanitary inspectors should be appoin-

ted to visit all towns and cities specially liable to the disease, to counsel with the local authorities as to the best methods of prevention. This work should be vigorously prosecuted before the disease reaches our shores.

ADVICE TO CITIZENS.

The cause of cholera is contained in the discharges from persons affected by the disease, or in things infected by such discharges. Should the disease reach our shores, the first case, and after this the first case which reaches any given community, should be strictly isolated. All infective material from these and from any subsequent cases should be destroyed in such manner as to stamp out the disease. Intelligent sanitary precautions beforehand, and scientific disinfection and treatment in the presence of the disease, should take the place of the necessary cruelties of a panic. In case any city or town is infected, the same principles of isolation should in general be applied to the city as to the infected individual. Intercourse with other cities and places should be under sanitary supervision, substantially as set forth in the rules and regulations of the National Board of Health respecting the inspection of travelers, disinfection of effects, vehicles, etc.

Health officers and inspectors appointed by state or provincial boards of health should, in addition to other sanitary work, see that the localities have set apart, erected, or planned to be so set apart or erected, structures which shall possess the sanitary requirements of an isolation hospital. But as regards all necessary work by local boards of health, most state and provincial boards of health have printed and issued documents which give ample instruction.

Your committee recommend that when this conference adjourns it be to meet in Washington, D. C., the second Wednesday in December next, and that the secretary of this conference be directed to invite the attendance at that time of quarantine officers and the health officers of the principal cities in the United States and Canada; and that all delegates to that meeting be prepared to report the sanitary status of their state or locality, and steps have been taken to improve the same, and to prevent the introduction of disease.

DOMESTIC CORRESPONDENCE.

LETTER FROM BALTIMORE.

GOVERNMENT PROTECTIVE MEASURES AGAINST CHOLERA—INSPECTORS.—QUARANTINE—COAST PATROL—RAG EMBARGO.

BALTIMORE, MD., NOV. 18, 1884.

Mr. Editor.—Agreeably with your suggestion I transmit the following summary of the protective measures against cholera which have been put into execution by the National Government during the present year.

First may be mentioned the Sanitary Inspectors appointed by the Secretary of State upon the request of the Surgeon General of the Marine Hospital Service in Toulon, Marseilles, Cette, Bourdeaux and Havre, Hamburg, Antwerp and Rotterdam, and in Liverpool and London. These inspectors have been attached to the consulates of the cities named and their examination of both persons and cargoes of all vessels has been a prerequisite to the granting of the consular bills of health.

Secondly, National Maritime Quarantines have been maintained at the Delaware Breakwater, Cape Charles, Sapelo, Ship Island and Egmont Key, Fla. The quarantine expenses of Pensacola have also been met by the General Government, the Governor of Florida having certified that his state has no fund with which to maintain this station.

A Third precaution has been the coast patrol by the vessels of the Revenue Marine Service which were ordered to ply on the outermost border of their cruising grounds, to hail incoming vessels and direct those with sickness on board to the proper anchorage for quarantine examination.

The National Quarantine Service has been administered during the past three years by the medical bureau of the Treasury Department, the Marine Hospital Service. The facilities at the command

of Surgeon-General Hamilton are in part shown in the above lines and may be reviewed as follows:

First, Information from Foreign Ports is promptly transmitted by telegraph or letter by Government Consuls through the State Department. Through this same department also preventive measures are extended abroad.

Second, Information from Home Ports is obtained from Collectors and Surveyors of Customs, who also in their right of search and detention of vessels are potential agents.

Third, As Naval Aids may be mentioned the Revenue Marine Service with its well equipped steamers guarding the entire coast, and the Coast Survey and Light House Establishments whose charts and signal lights and services in buoying out channels have been of great value.

Finally, For Professional Work, there is available the Marine Hospital Service, whose physicians, numbering about one hundred and sixty are stationed in every seaport, and are especially acquainted with local health laws and accustomed to the transaction of public business.

A word as to the laws under which national quarantine is administered. There are three, viz.,

First, The law of February 25, 1799, subsequently embodied in section 4792 of the Revised Statutes, directing that State Health Laws shall be observed by United States officials as directed from time to time by the Secretary of the Treasury, and authorizing the erection of quarantine warehouses.

Second, The law of April 29, 1878, passed when the Russian plague was imminent, and forbidding or restraining the entry of vessels from infected ports. One portion of this law specifying its executive officer was repealed in 1879, but its restrictive clauses are still in force. Its execution was transferred by the temporary act of June 2, 1879, to the National Board of Health, but this function and all other executive powers of the National Board expired by limitation June 3, 1883.

Third, The acts of 1883 and 1884 authorizing the President to use a sum not exceeding one hundred thousand dollars in aid of local boards or otherwise in preventing and suppressing epidemic disease. It is this fund which is now being used by the Marine Hospital Service.

The position of the Government toward the States in matter of quarantine is that of a strong ally supplying help where needed and in the absence of local quarantine assuming control and responsibility. Even in the latter event care is taken to be in harmony so far as possible with ports affected by the quarantine and, for illustration I may state that the station most recently established by the Government, that at the Delaware Breakwater, was opened at the request of the Boards of Health of Lewes, Wilmington and Philadelphia and with the advice of Senator Bayard of Delaware. Any policy more radical than this must call for such an adjudication of the respective claims of commerce, sanitation and the constitution as has never yet been successfully made.

A *Fourth* measure is the embargo on rags, also the circular of July 2 requiring Collectors of Customs to refuse entry to all baggage shipped from infected districts subsequent to June 20, until the same has been certified as innocuous by the local quarantine officer.

One of the most troublesome matters before the department this year has been the controversy over the embargo on rags furnishing a typical illustration of the irrepressible conflict between trade and sanitation. A review of Government interference in the rag trade takes us back to March 3, 1879, when by direction of Surgeon-General Woodworth, M. H. S., restrictions were placed upon rag importation, which restrictions were removed after a period of three months because of the summary extinction of the Russian plague by means of the military cordon and burning of infected houses with their contents. Last year during the quarantine season of 1883, the cholera prevailing in Egypt, the Collectors of Customs were ordered to refuse entry to all Egyptian rags until the municipal health authorities had furnished written certificates that in their opinion no danger would result from the discharge of the cargo, thus placing the responsibility and supervision of disinfection upon the city authorities.

During the present year the rag question has assumed its greatest importance. As early as April 22, before the appearance of cholera in Southern France, a provisional embargo was placed upon rags from infected ports. The infected ports were then supposed to be in Egypt only, and as a large proportion of the rag importation is from this country, regulations were made requiring specific methods of

disinfection before shipment under the supervision of a Government inspector at Cairo, whose certificates were authenticated by the Consul General. But Congress having failed to make further provision for a Consul General at Cairo this plan was necessarily abandoned July 19.

A circular, however, was issued on this same date—the cholera in the mean time having appeared in France—prohibiting “the unloading of rags from infected ports and of rags which are suspected on good grounds of being infected from any foreign port.”

The above order it may be seen was capable of wide application but on September 1 a still more stringent one was made, entirely prohibiting the importation of rags for a period of three months, the intention being to act upon the safe side until the meeting of Congress which must then assume the responsibility.

For a full account of the controversy which followed this order I may refer to the *New York Herald* of dates from October 9 to 16.

The paper manufacturers complained of serious injury to their trade.

There are said to be 1,100 paper mills in the country, employing 100,000 people and a capital of \$800,000,000 and of the 260,000 tons of rags annually used 84,000 tons are imported. These statements show the interests at stake, but to my mind give additional reason for the strictest surveillance. Last month, however, the then secretary, Hon. Mr. Gresham, saw fit to modify the order, but the present secretary, the Hon. Hugh McCullough, acting on the petition of a number of prominent New York physicians and on the advice of the Surgeon-General, M. H. S., has made the embargo more stringent by circular dated November 15.

It is hoped that the ultimate effect of the controversy will be to insure a thorough cleaning and disinfection of all rags before their shipment to this country.

W. W.

MUD BATHS.—Cincinnati has a Medicated Mud Bath Company which has opened a bath house for the purpose of enabling Cincinnati rheumatics to have the mud bath treatment at home.

COMMUNICATIONS.

MALARIAL STUPOR AND CONGESTIVE FEVER.

WINFIELD, ARK. OCT., 25, 1884.

Editors Courier.—As I have been reading your valuable journal for some time, and realising much benefit therefrom, I still look in vain for some physician in this or some other state where there is so much malarial poison to contend with, to write up and report his cases. It is true that Prof. McAlmont, of Little Rock, gives his successful use of opium in the July No. of the *Courier*, and many no doubt will be much benefited thereby, but still we meet with cases in which I have seen this practice fail; and again there are plenty of doctors in Arkansas that cannot tell the difference between congestion of the brain and malarial stupor. Prof. Henry Hartshorne, in Reynold's System of Medicine, speaks of it plainly, but there are few who have this work.

I was acquainted with congestive fever in Alabama and saw a few cases of what the doctors called "yellow chills" there, but never saw the amount of stupor there that there is here. We have different grades of congestive fever here. In some cases the effect seems to all fall on the stomach; it produces congestion of this organ and everything is rejected as fast as swallowed; coffee ground vomit is common in this class. In others it falls on the bowels, produces lime water discharges, and soon terminates fatally. Again it all seems to fall on the brain, and these cases are often treated as inflammation of the brain. Then we have "malarial stupor," that has little fever attending it. I do not know how to illustrate this better than by giving a few clinical cases.

CASE I.—December 10, 1881, I was called to see Mrs. S., aged 71. She had enjoyed good health for a long time, but after having been exposed to damp and cool weather on one of our low creeks, she lost all taste for food, and had some fever on the seventh. The next day she was better. On the ninth she complained some early in the morning and went to bed; she said but little until noon

and then she became quiet, and as she was living with her son and his wife about to die with dilatation of the ventricle, they paid but little attention to the old lady. Late in the evening they found her dying, as they supposed, and let her alone until next day, when they came for me to go and see her. On my arrival I found her breathing tolerably fast, pulse over one hundred; pupils dilated, bowels moving involuntarily; stools very offensive to the smell; her feet were cold and clammy. On shaking her she could by loud calling be made to hear. Not having seen at that time Dr. Hartshornes' article in Reynold's System of Medicine on "malarial stupor," I concluded that I would try quinine and whiskey; I mixed ten grain in whiskey and water enough to make an ounce, and put it into her mouth by littles, until I got it down her. She would swallow only by rubbing her throat externally, then only by a spasmodic action of the muscles. As her bowels were still moving I thought I would use laudanum and starch-water as an injection. After doing so, the bowels checked up for a short time and it was only after repeated trials that I got them well controlled. I continued the quinine and whiskey as before every two hours, until three doses had been given. By this time she had gotten stimulated so she could talk; and by keeping up the quinine several days she got well. In this case I had no thermometer to take the temperature, as I wished to do.

CASE II.—September, 1882, I was sent for in haste to meet a well-educated doctor from Indiana in consultation. I had to ride fifteen miles and of course went as fast as I well could, for I learned from the messenger who came for me that two of the same man's children had died within the past seventy-two hours and they thought the third one would die. On my arrival I found a girl sixteen years old, and well developed; she had not spoken with any reason to what she said for thirty hours. Her pulse was 156, temperature 103°, respiration 41, feet cold, hands hot, but the fingers were cool and of a blue hue, her pupils were dilated, tongue brown, teeth covered with black sordes, bowels constipated and abdomen swollen. This all looked grave indeed, as one of her brothers was laid out in the next room and one had been buried the day before. The physician in charge said that he could not do any thing with their fevers. Of course, I diagnosed congestive fever. She could swallow but little, so I preferred arousing her with a large blister on the nape of the neck, and by warm applications

to her limbs; after a little we got five grains of quinine down her with ten drops of muriated tincture of iron, carb. ammon. grains v. diluted phosphoric acid drops twenty, every two hours. In ten hours she could talk sensibly, and she made a good recovery. In this case I used the acid on account of the septic condition of her blood and to act as a tonic to the brain.

The two that had died were in the same condition. They never got aroused up from the time they were taken until they died, and in cases of congestion, where there is no circulation in the extremities, and a pale haggard expression on the face, with choking and great difficulty of breathing, I certainly can not urge too strongly those members of the profession who have never tried it to use nitrite of amyl. I have used it in many cases where the patient seemed to be far out of reach with any drug, and it restored the circulation again. Let them inhale it until the face gets flushed. I was induced to try it by seeing it recommended so highly by Dr. W. E. Saunders' experience with it in India. See *Am. Jour. Med. Sciences*, Jan., 1877, page 244.

Amyl nitrite dilates the capillaries, gives strength to the heart and causes profuse sweating. Any physician who has never used it, and who has congestive chills to treat, will regret that he has been so late in beginning with it, after he gives it a fair test.

CASE III.—Mrs. P., aged 61, strong and able-bodied widow lady, had had two chills in three days, and on Oct. 27, 1883, she had a hard shake, and high fever following. I was called on the evening of the 28th to see her, and found her unconscious, with sighing respirations, pulse small and irregular, 140 to 145—I had no thermometer with me. Her feet and hands were cold and clammy. She had not spoken a word intelligently for thirty-six hours. Bowels moving involuntarily, I applied a blister-plaster to the back of her neck; put eight or ten drops of amyl nitrite on a handkerchief and put it to her nose. In ten minutes the pulse began to get stronger at the wrists and her face began to flush; I kept on at this for 20 or 30 minutes and she aroused from her stupor; I gave quinine and ammonia carbonate, in good sized doses, for twelve hours and let the plaster draw well on her neck; and by good attention otherwise, she made a good recovery. In this case, there was stupor of a malarial origin. With the amyl nitrite I brought her to consciousness, and I gave quinine to keep off another paroxysm, in which I succeeded.

CASE IV.—Sept. 4, 1883, I was called to see Wm. H., aged 60. On my arrival I found him stupid, but could arouse him and get him to talk all right for a while. He had been attacked with cholera morbus the day before, and his bowels still were moving too often. Opium checked them. I then administered toddy and got him aroused up all right for the time. I had to leave soon, and go ten miles another way, and left special orders for quinine to be given to keep off a chill. On the next morning I was sent for in haste to see the patient again, the messenger telling me that he had grown worse at midnight, and that they did not think he could live but a short time. On seeing him this time I found him cold to the knees and elbows, fingers and toes blue. No pulsation in either the wrists or ankles, breathing heavy and but ten to twelve respirations per minute. No sensibility was manifested on pricking the skin with a needle; bowels moving involuntarily; and the discharges were very offensive. This looked like a gone case to me, and I soon found that on my departure the first time that I saw him he refused to take the quinine as I had directed. I ordered hot bricks and iron applied to his feet and back, rubbed his hands with hot woolen cloths, and using amyl nitrite in plenty. After an hour of hard work we brought him to life, so to speak. I then began with quinine and whiskey, and I stayed with him until near 4 o'clock P. M., and then I left directions in the hands of an old man that I was certain would carry them out.

I left, and, as it was eleven miles from my office, I heard nothing from him on the sixth, but on the seventh at eight o'clock, I was called again, and, informed by his son-in-law (who was a man of good judgment,) that he did not think it worth while for me to go only to please the family. I went, however, and got there at 10 P. M. I found the old man worse than ever. I could hear him breathing while I was out in the yard. He had lost consciousness at three that evening, and had grown worse all the time. He had not swallowed anything since 4 o'clock; his legs were cold and pulseless, and his arms up to the middle above the elbows were cold and clammy, and no pulsation in that part.

I put quinine in whiskey and told the nurse to put a little in his mouth and rub his throat and see if he would swallow it. I used the amyl nitrite, and it would bring up the pulse at the wrist for a little while, but it would go away again.

I had his legs bathed in hot water with capsicum in it, and

then wrapped them up in hot blankets, and as I was very sleepy, I told the nurses how to give the medicine provided he got so he could swallow. His children were troubled about his not having made a will, and were anxious for his recovery. I thought that if he got so he could swallow I would give tincture digitalis, phosphoric acid dil., carbonate of ammonia, quinine and tincture of iron every three hours in good doses. I retired to bed out in the hall, and after a few hours I heard him say, "You will just keep pouring that old bitter stuff down me." I went and found him some better, so as to know me.

This was at 3 A. M. He gained consciousness considerably, on until 6 A. M. Then he got colder than he had been, but by plenty of stimulants he got fully aroused, and in two weeks was up and around. This case was one of some interest to me. The severity of the onset of the disease; the long state of coma, and the prompt effect of quinine, are all worthy of special attention. I will add no other case for this time. I do not pretend to say that the above course will cure every case; I have seen all measures fail in cases that did not seem near so grave as some I have here cited. But these alone are but a few of the many that I have thus treated. Hoping that we shall hear from some older practitioners on this subject, I with all professional respect sign myself,

CHEVER BEVILL.

NOTES AND ITEMS.

THE BOY AND THE BONE-SETTER—Speaking of bone-setters recalls a good story which occurred in the North of Scotland, where one of them had risen to great fame and no small fortune by his skill. A country lad residing a few miles off had got his leg hurt at one of the local factories, and had been treated for some time by the local medical man without any good result. His mother, who had great faith in the neighboring bone-setter, wanted the lad to go to him, which he declined, preferring, as he said, the "reg'lar faculty." Eventually, however, his mother's persuasions prevailed, and he agreed to allow himself to be taken to see Daniel R—, the bone-setter. A bed for the invalid was extemporized on a cart,

and, accompanied by his anxious mother, he was after a rather painful journey taken to the town where the bone-setter resided. The leg was duly examined, and it was found necessary to haul it very severely, in order, as the bone-setter said, "to get the bone in." The lad was liberal with his screams while this was going on, but eventually the bone was "got in," and he was told to go home and in a few days he would be all right and fit for his work. He was lifted upon the cart again, and, with his mother seated beside him, set off for home. "Didn't Danny do the thing well?" said the joyous old lady. "Yes, he did, mother," said the lad, but I was na sic a fool as gie him the sair leg!" The "reg'lar faculty" will, we have no doubt, appreciate the story.—*Whitehall Review*.

MRS. WINSLOW'S SOOTHING SYRUP.—Dr. A. B. Hirsch at the Philadelphia County Medical Society reports a case of poisoning in a boy twenty months old from the administration of this much used nostrum. Six doses of half a teaspoonful each were given between 4 P. M. and 6 A. M., though the mother thinks that not more than one-half of any dose was actually swallowed by the child. A little less than two hours after the last dose all the symptoms of opium poisoning were present in an alarming degree. Treatment was at once instituted by administering tincture of belladonna and using mechanical exercises and stimulation to prevent the child from falling asleep. By midnight the symptoms of opium intoxication passed off and the child was allowed to sleep a little while at a time. Undoubtedly a fatal result would have followed here if active treatment had not been adopted.

NATIONAL CONFERENCE OF THE STATE BOARDS OF HEALTH.—When this conference adjourned at St. Louis Oct. 14, it was resolved to hold another meeting in Washington early in December. This adjourned meeting will be held in Washington at the Ebbitt House, the first session taking place at 10 A. M. Wednesday, December 10.

To this meeting are invited quarantine officers and health officers of the principal cities in the United States and Canada, who are requested to be prepared to report the sanitary status of their respective localities and what steps have been taken to improve the same and to prevent the introduction of disease.

The meeting is one of great importance in view of the extension

of cholera in Europe and the imminent danger of its reaching our own country.

WEIGHT AS AN INDICATION IN LIFE INSURANCE.—DR. JOEL SEAVERNs draws the following conclusions from a careful study of the records of examination of the nearly 50,000 members of the Royal Arcanum, and the returns of death concerning 974 members who have died: that for life insurance purposes men whose weight is above that laid down in the usual tables are better risks than those whose weight is less; that among the latter—light weights—the usual variation of twenty per cent., which is assumed to be within safe limits, is not safe, and that if we accept men, especially young men, whose weight is fifteen per cent. below the standard we are approaching dangerous standing ground, and inviting, as it were, deaths from phthisis and wasting diseases, and when we reflect how great is the mortality from phthisis in all insurance organizations we cannot too strongly emphasize the necessity of constant vigilance in this direction and of not only exploring most carefully the chests of such men, but also of taking into account all these other features which I think often precede the changes in lung tissue discernible by the ear and which can be observed at what may be called the pretubercular stage.

With the heavy weights the case is different; free from danger of phthisis, we must, to be sure, take the greatest care to see that the heart and kidneys are healthy and that the family history does not point to cerebral disease. With these points well guarded, I am satisfied that an excess of twenty-five per cent. in weight is not dangerous in men who have not injured or are not injuring themselves by alcohol.—*Boston Med. and Surg. Jour.*, Oct 23, '84.

STATEMENT RELATING TO THE INTERNATIONAL COLLECTIVE INVESTIGATION OF DISEASE PROPOSED AT THE INTERNATIONAL MEDICAL CONGRESS AT COPENHAGEN.—The general meeting of the International Medical Congress, held at Copenhagen, on August 14, 1884, upon propositions made by Sir James Paget, Professor Ewald of Berlin, Professor Bouchard of Paris, and Dr. Billings of Washington, passed the following resolutions:

1. That an International Committee be formed for the Collective Investigation of Disease, in connection with the work of the International Medical Congress.

2. That the following gentlemen do represent their respective countries thereon:

As Representatives of Denmark.—Professors Trier, and C. Lange, of Copenhagen.

As Representative of Scandinavia.—Dr. E. Bull, of Christiania.

As Representatives of Russia.—Dr. Rauchfuss, of St. Petersburg.

As Representatives of Germany.—Professors Ewald and Bernhardt, of Berlin.

As Representatives of Austria-Hungary.—Professor Schnitzler, of Vienna; and Professor Pribram, of Prague. To whom was added by co-optation.—Professor Korányi, of Buda-Pest.

As Representative of Switzerland.—Professor D'Espine, of Geneva.

As Representatives of France.—Professor Bouchard, of Paris and Dr. Lépine, of Lyons.

As Representatives of Great Britain and Ireland.—Sir William W. Gull, Bart.; Professor Humphry, of Cambridge; Dr. Mahomed, of London.

As Representative of British India.—Sir Joseph Fayrer, K.C.S.I.

As Representatives of the United States.—Professor Jacobi, of New York and Prof. N. S. Davis, of Chicago.

As Representative of South America.—Dr. Gutiérrez-Ponce, of Paris.

As Secretary-General.—Dr. Isambard Owen, of London.

Representatives of other Countries to be hereafter appointed.

In accordance with the following resolution of the first meeting of the above committee held at Copenhagen on the following day:

“That the Secretary be instructed to prepare a statement as to the objects of the Committee, for translation and publication in the journals of the various countries represented;”

I beg leave to submit the following statement to the members of the Medical profession of the United States.

ISAMBARD OWEN,
Secretary-General.

5, Hertford Street, Mayfair, London.

The main objects which the Committee seeks to attain through the Collective Investigation of Disease are to widen the basis of Medical

Science, to gather and store the mass of information that at present goes to waste, to verify or correct existing opinions, to discover laws where now only irregularity is perceived, to amplify our knowledge of rare affections, and to ascertain such points as the geographical distribution of diseases and their modifications in different districts. It will be its endeavor to place clearly before the whole profession the limits and defects of existing knowledge, as well as to stimulate observation, and give it a definite direction. It will be a not unimportant incidental result of its work, should it tend, as is hoped, to the better training of the members of the profession in habits of scientific and practical observation, and in systematic methods of recording the facts which they observe.

The age in which we live has seen enormous advances in the sciences on which the fabric of medicine rests, such as chemistry and other branches of physics, physiology, and pathology. Each of these has taken giant strides. It must be admitted, however, that purely medical knowledge has scarcely made proportionate progress. It cannot be expected that it should do so, as it deals with the aberrations of the most complex of organisms, is of all sciences the most difficult, and demands the greatest patience and the largest accumulation of data.

Hitherto the advancement of medical science has been brought about mainly by individual effort. The value of such work in the past we in no way underrate, nor do we desire to lessen the amount of it in the future; but in medical science there is much that defies interpretation from individual experience, and many problems so far-reaching in an ever-widening field, with elements so manifold, that no single man, however gifted and long-lived, can hope to bring the whole within his range. The need, therefore, in medicine, of that combination and concentration of individual work which is adopted in many other branches of science and in commerce, and to which increasing facilities of intercommunication have given so much impulse and so much strength, cannot be questioned. Indeed, it may be said that, resting on individual research alone, medical knowledge can be advanced but slowly and with difficulty. Future progress to any great extent must be the work, not of units acting disconnectedly, but of the collected force of many acting as one. For many to act as one, organization

is needed; that organization it is the purpose of our Committee to supply.

Disease is many-sided; and we wish to include in our organization those who see it from every side. All, therefore, whether hospital physicians, family and school attendants, specialists, medical officers of the army and navy, and of workhouses and asylums, will be asked to contribute their quota of observation to the common fund.

In England and Germany organizations for this purpose already exist, through which good work has been accomplished; and a volume entitled the "Collective Investigation Record," containing tabulated returns, with reports upon them and other matter, is published annually by the British Medical Association. France and Austria are alive to the importance of the new method. In Scandinavia and in the United States the foundations of associations have been laid. Denmark, Russia, and Switzerland are setting their hands to the task. To unite these several associations by an international organization for the study of various problems, and to induce the formation of similar combinations elsewhere, is felt to be a work peculiarly befitting an International Congress. Our Committee is enjoined by the Congress at Copenhagen to endeavor to carry out this work, and, in compliance with that injunction, it invites the co-operation of all who have at heart the promotion of medical science and practice.

The following is the proposed method. A subject having been selected, a person or persons of acknowledged authority will be asked to write a memorandum in the form of a short essay upon it. The memorandum will succinctly give the present state of our knowledge. It will also point out the directions in which further research may best be made; and, with this view, will suggest a few simple and definite questions upon the subject selected. The questions will relate to matters of fact, to be elicited by observation of cases rather than to matters of opinion.

The contemplated organization will, it is hoped, in time enable the Committee to ask and collect answers to these questions from the profession at large wherever scientific medicine is studied or practised. It will be a further duty to examine, arrange, tabulate, and deduce results from the mass of observations thus collected, due credit being given to each contributor for the information he has furnished; and reports on the results of the several investigations will be laid before the International Congress at its next meeting at Washington.

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